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ABSTRACT

Progress made by African governments toward improving their educational policies is described in this collection of papers, which were presented at a conference cosponsored by the World Bank and the U.S. Agency for International Development (USAID). Since the mid-1980s, several educational policy adjustment programs have been initiated in Sub-Sahara Africa. This document examines these policy efforts, drawing on reports from government leaders and donor representatives from Ghana, Malawi, and Senegal. Three issues are addressed: the types of policy and budget changes; the effects of central policy change on the local school and community; and ways in which policy adjustment programs can strengthen institutions. Contents include: "Education Policy Adjustment," by Bruce Fuller and Aklilu Habte; "Policy Reform to Raise School Quality," by Edward Ngaye; "Ghana's Policy Adjustment Initiative," by Vida Yeboah; "Social and Political Constraints on Education Reform," by Birger Fredriksen; "Inducing and Monitoring Policy Change," by Frances Kemmerer; and "Lessons Learned?" by Bruce Fuller. Three figures and two tables are included. Distributors of World Bank publications and lists of recent World Bank and Africa Technical Department Series discussion papers are included. (44 references) (LMI)

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World Bank Discussion Papers
Africa Technical Department Series

Adjusting Educational Policies

Conserving Resources while Raising School Quality

Bruce Fuller
Aklilu Habte, editors

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World Bank Discussion Papers
Africa Technical Department Series

Adjusting Educational Policies

Conserving Resources
while Raising School
Quality

Bruce Fuller
Aklilu Habte, editors

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Washington, D.C.

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Abstract

African governments and donor agencies have realized in recent years that development programs can only succeed if built upon sound policy and institutional foundations. Since the mid-1980's, several educational policy adjustment programs have been initiated in Sub-Saharan Africa.

This volume explores these early policy efforts – drawing on reports from government leaders and donor representatives in Ghana, Malawi, and Senegal. Three specific questions are addressed: What types of policy and budget changes have been attempted? What lessons have been learned regarding local school and community effects, stemming from central policy adjustments? How can policy programs better complement long term efforts to strengthen institutions?

Papers in this volume were presented at a conference attended by government officials and donor agencies, co-sponsored by the World Bank and USAID. Highlights of the conference debate also are reported.

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Foreword

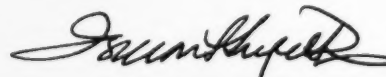
African governments — since independence — have struggled to mobilize sufficient public resources to broaden educational opportunities. In turn expansion of basic schooling, complementing efforts in other sectors, has spurred economic growth in many African societies.

The past decade, of course, has been a sobering time for many African states. Efforts to simultaneously expand schooling, maintain educational quality, and more equitably distribute the benefits of basic education have strained the political will and fiscal fragility of many governments. And the decade-long process of adjusting macroeconomic policies has further constrained the education sector's institutional capacities.

Since the mid-1980s, several African governments have intensified efforts to conserve their educational resources — through significant adjustments in policies and institutional structures. Determined conservation of resources through specific cost-saving measures often produces more efficient allocation of these resources to strategies to consistently boost student achievement, equity, and subsequent economic and social benefits.

This collection of papers reports on initial progress made by African governments in improving their educational policies. The recent conference for which these papers were prepared —co-sponsored by the World Bank and USAID — convened government leaders and donors who have worked together in this novel area of institution building.

The president of the World Bank recently announced a substantial increase in lending to support policy change and investment in the education sector. It is timely that we reflect upon how policy adjustment strategies in Africa have been implemented and how they have affected schools and children. What types of policy adjustments are more likely to succeed? How can policy change strengthen educational institutions over the long run? This book takes a modest step in answering these questions.



Ismail Serageldin
Director
Technical Department
Africa Region

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Developing countries — over the past five decades — have made breathtaking progress in rapidly *expanding* mass education. More recently, many governments have turned their attention toward improving school *quality*, even rethinking the purpose and content of basic education within rural and urban settings. And most political leaders realize that quick growth in schooling does not necessarily lessen *inequality* in terms of which families gain access to quality education.

In Africa, however, governments face severe constraints in their struggle to expand educational access, raise school quality, and advance equity. Entering the 1990s, per capita income in many African nations was at or below levels observed in 1960. Resources available for basic education fell in real terms throughout the continent, due to external economic shocks, political strife, and competing development priorities.

Following on the heels of *macro-economic* adjustment programs — undertaken jointly by governments and development banks — a handful of *education* policy reform programs were being developed by the mid-1980s. This modest book reports on these earliest efforts, initiatives partially financed by the World Bank or the U.S. Agency for International Development. The thinness of this volume reflects how little we know, at this early point, about the actual effects of policy adjustment in the education sector.

This book does surround and describe the range of educational policies and budget items on which sector-adjustment efforts have focused. We concentrate on experience within three specific countries: Ghana, Malawi, and Senegal. Our contributors speak to three fundamental issues:

- *What types of policy and budget changes have been attempted*, and which are more likely to be successfully implemented? What kinds of policy reforms face stiffer constraints in terms of technical complexity or political opposition?
- *What lessons have been learned about the local effects of central policy change?* Policy adjustments usually entail conserving resources that are being used inefficiently (or inequitably), then reallocating these funds to efforts that help raise the effectiveness of local schools. But what evidence do we have that more (technically) rational utilization of resources can be attained, and that concrete local effects can be observed?
- How can policy adjustment programs better *complement long-term efforts to strengthen institutions?* Most policy programs are blended with more traditional project assistance, technical support, purchase of school inputs, and capacity-building. Are governments becoming more skilled in generating policy alternatives and assessing implementation constraints? And are donors learning something about how to mix policy and project forms of assistance?

You will quickly realize that we still have a long empirical road to travel before evidence is sufficient to answer these questions.

Chapters in this book were originally presented at a recent conference held in Washington D.C., aimed at sharing early experience and lessons-learned. The seminar involved African government officials and donor agencies, and was sponsored by the World Bank and USAID. The meeting was co-chaired by Aklilu Habte and Gary Theisen. The International Science and Technology Institute helped organize the meeting. Special thanks also are due to Joan Claffey, Martha Engel, Rick Huntington, Irene Landwehr, and Jim Socknat. The papers benefitted from review by Cameron Bonner and Emil Baran, under the guidance of Peter Moock and Mr. Socknat. Steve Slaner assisted with the editing of chapters, and Arc & Line Design produced the final volume.

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EDUCATION POLICY ADJUSTMENT
Defining Central Strategy, Assessing Local Effects

Bruce Fuller and Aklilu Habte

A decade ago the World Bank, with its client governments, embarked on initiatives that aimed to modify the rules and institutions which organize national economies. More recently, donors working in the education sector have been attracted to the promise of making policy adjustments in school institutions. Strategies mounted in particular countries vary significantly. Yet the overall shift is remarkable — moving away from conventional projects and toward policy and budget reform.

This sharp move toward education sector adjustment is motivated by several factors: Governments and donors recognize that explosive post-war expansion of mass schooling, while yielding benefits, has made educational institutions more brittle — unable to sustain this pace of growth, unable to backstop eroding levels of educational quality, and unable to use scarce resources more effectively. Continuing conventional project assistance, while necessary, is not sufficient for long-term strengthening of central education ministries and local schools. In many cases, traditional “stove-pipe projects” simply add categorical programs that may intrigue Western sponsors but which are difficult to sustain over time. Unless a nation’s structure of school finance and management provides inputs and human resources that effectively boost literacy, an array of narrow projects can only attack symptoms, rather than strengthening underlying institutional capacities over time. It is like putting a fresh coat of paint on a

building that is crumbling.

The chapters which follow define and illustrate the burgeoning field of education policy adjustment. We review variation in specific country strategies. Our contributors assess common policy and budget reforms aimed at boosting the efficiency of different national educational systems. We report on lessons learned from these initial attempts at sector adjustment. Do policy programs yield intended policy and budgetary effects within central governments? Do adjustment initiatives contribute to the long-term strengthening of central institutions and enhance the quality of local schools? These are the basic questions asked by our contributors.

A debate is unfolding over what types of macroeconomic adjustment strategies are most effective. The very definition of “effective” is evolving, now taking into account effects felt by the poor and by fragile governments. In contrast, little debate is occurring on alternative forms of education sector adjustment. We seem to be drawn to this novel medicine without critically assessing its multifaceted effects.

More determined efforts are required to understand the effects of adjustment strategies within the education sector, then to reflect on how policy interventions can be better crafted. Careful thinking is needed at the outset to specify what results — within central governments and within schools — are intended. Short-term impacts on government spending are important, through the containment of inefficiencies

or encouragement of greater cost-recovery. Yet policy change also intends to touch teachers and pupils — encouraging central allocations and school-level practices that more effectively boost children's basic literacy and achievement. We are just beginning to understand the conditions under which central policy improvements influence local action.

Surrounding and Defining the Field

Children throughout southern Africa survive on eating *nsima*. Like other forms of corn meal, *nsima*'s nutritional value is sufficient, not impressive, with long-term effects on growth that are significant, not optimal. Is this an apt metaphor for sector adjustment programs? Policy reform initiatives are vaguely tasty and certainly filling. With little variation in the recipe, and buttressed by faith in its effects (as opposed to hard evidence), donors continue to move aggressively into the policy adjustment area.

The field itself is still in the process of definition. Government officials and donors cite the same types of policy changes as exemplars of what sector adjustment is all about. Others argue that "adjustment" is simply a euphemism for cutting government spending. While macro-economic adjustment does have this focus, the earliest education adjustment programs (described in this volume) focus on shifting education resources to more effective inputs or using these resources to achieve more equitable patterns of pupil subsidy. Programs in Malawi and Mali actually push governments to protect or boost expenditures for education, particularly spending for primary education.

Below, we sort the growing list of possible policy changes into clearer categories — illustrating the variety of objectives which can be served by sector programs (also see World Bank 1988a). The general field, however, remains underdeveloped in terms of linking various policy actions to expected outcomes. Our capacity to monitor the effects of policy change even within central governments, let alone local schools, remains quite crude. Nor is our knowledge systematic as to what combinations of policy intervention are most feasible or effective. Much remains to be learned regarding what implementation steps are most efficacious.

Some project officers within donor agencies argue that each adjustment package must be crafted to fit country-specific conditions. We agree, in part. However, given the extent (and cost) of sector adjustment operations, we should push to extract generalizable lessons learned and common mistakes made. Only then can we define the types of policy initiatives and country conditions under which expected (short- and long-term) outcomes will likely occur.

Growth in sector adjustment programs. One fact is unambiguous: the share of multilateral assistance now linked to policy adjustment has risen dramatically over the past decade. One-fourth of total World Bank lending now goes for macroeconomic or sector adjustment activities. Conditionalities linked to balance-of-payments support or exchange rate reforms often influence the education sector. Ceilings on civil service posts, for instance, limit governments' capacity to hire new teachers. Since the education sector represents 15% to 35% of all government spending in most African countries, sector reform not surprisingly becomes an important ingredient of macroeconomic adjustment strategies (World Bank 1988b, 1989).

Half of all World Bank loans in education now contain policy measures, and this proportion is increasing. The most common form of education loan is now a hybrid combination of policy adjustment and conventional project assistance. With some reservation we introduce a new acronym — SAI — to characterize "sector adjustment and investment" operations. Mike Wilson's (1988) review of Bank experience reveals a variety of instruments now used in working with governments, including conventional projects, sector investments providing ministries discretion over allocations, and adjustment loans that tightly link policy and budget reforms to disbursement of loan tranches (see also Chapter 4 by Birger Fredriksen).

Similarly, basic education initiatives undertaken by the U.S. Agency for International Development (USAID) increasingly combine program and project assistance in a variety of ways, the former encompassing policy dialogue, information systems, and research — all aimed at provoking policy and fiscal reform. With limited resources, USAID usually provides in-country technical assistance to the education sector and avoids large capital invest-

ments. Work with African governments increasingly involves policy dialogue and reform aimed at improving long-term management capacity, boosting efficiency, and addressing inequities in terms of who benefits from formal schooling.

One USAID project recently begun in Mali provides technical assistance to help the government implement policy reforms developed in collaboration with the World Bank. These reforms provide for the shifting of excess resources from secondary schools (with a low pupil:teacher ratio of 14:1) to primary education. USAID assistance will help the government in developing a modest information system necessary for tracking the shift of teachers and expenditures. USAID also is financing an inservice teacher training program to help upgrade primary school quality, another policy objective worked out with the Bank. USAID and the French aid agency are contributing to a \$12 million quick disbursing fund linked to successful implementation of policy and budget adjustments.

Education sector adjustment: a slippery concept. Let us try out a specific definition of the process: Governments and donors negotiate and implement discrete policy or budgetary changes that attempt to contain government spending, allocate scarce resources more efficiently, and/or strengthen incentives for improvement in school-level quality and performance.

Within our definition, "efficiency" can relate to the school's internal impact on children's literacy and achievement. For instance, government and private providers of education ideally support those inputs and pedagogical practices that most effectively boost pupil achievement. Efficiency also relates to outcomes external to the school. In many African settings, the school often imparts skills, knowledge, and attitudes useful in urban areas but of little relevance to conditions in rural communities. This represents an external inefficiency.

Our definition has two distinct characteristics. First, the emphasis is on outcomes or functions of policy adjustment as opposed to, say, policy levers that can be manipulated. Second, the definition assumes that these policy levers are directly connected to the intended outcomes — effects observed both within the central government and at the school level. Initial

sector adjustment efforts tend to be driven more by the proximity of policy and budget levers than by any clear understanding of long-term effects.

Policy Intervention within Uncertain Contexts

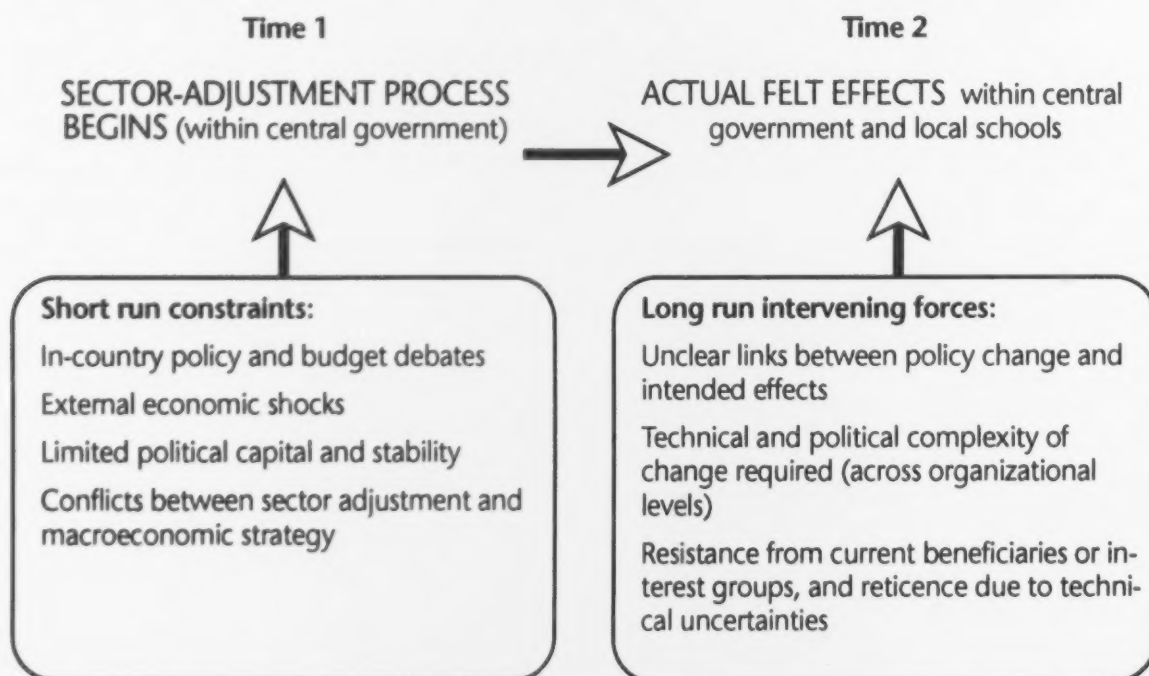
Policy change. Sector-specific policy adjustments enter a political and economic environment that determines whether the specific initiative will take hold in the short run. This environment has three key features, illustrated in Figure 1.1 (see page 4). The "indigenous" political-economy is constantly driving policy debate and occasional change. For instance, a government may be pushing to eliminate all pupil fees within primary schools at the same time that a donor is advocating stronger cost-recovery measures. Or the secular government may be faced with opposition from religious groups (many of which run schools) at the precise time that a donor is arguing to deregulate private schools.

In addition, external economic shocks frequently constrain African governments' capacity to finance sector reforms or to undertake any controversial "adjustment" requiring considerable political capital. Finally, policy reforms specific to the education sector may conflict with broader economic adjustments being pushed by the same or a different donor. Efforts to increase recurrent spending on textbooks, for instance, are stymied at times by overall spending ceilings negotiated with IMF or World Bank economists. Given the fluidity of the environment, the seemingly tight link between policy change and efficiency-effects can loosen considerably over the long run.

Even the term "adjustment" distracts us from effecting long term institutional change. A decade ago, adjustment of exchange rates or producer prices appeared to be a sufficient short-term antidote to economic decline. With greater sobriety, at least in Africa, donors are (again) realizing that more careful use of resources requires long-term improvement in institutional capacity and management.

The long-term effectiveness of policy change is constrained by three factors (seen on the right-hand side of Figure 1.1). In designing policy reform efforts, we must be clear about the nature and location of anticipated effects. Of-

Figure 1.1
Forces Moderating Actual Effects of Policy Adjustment Strategies



ten the results of manipulating one policy lever move across organizational levels in complex ways. Many SAI operations, for instance, now require governments to shift sector resources from secondary or tertiary institutions to primary education, recognizing that gains in basic literacy most directly benefit agricultural productivity and quality of life. While this shift can be monitored within central ministries, real change requires moving teachers (since salaries comprise the bulk of recurrent spending) and increases in class sizes at post-primary levels. Each of these shifts requires a great deal of diplomatic and technical work — at different organizational levels — before any impact can be observed.

Complexity of Institutions

Similarly, policy initiatives often underestimate the technical complexity of implementing meaningful institutional change, particularly at the school level. Donors are pushing governments, for instance, to reduce the rate at which pupils repeat a grade level or standard. The objective is admirable: to concentrate scarce primary school resources on those children who progress at reasonable rates. But the range of local actions required is very complex: assessing pupil achievement, keeping adequate records (when some urban primaries have over 3,000 students), and working with parents to explain the policy change.

Finally, actual effects stemming from policy change are blocked or watered down by institutional resistance — inertia or strong political opposition that can derail the best-designed reform. Policies that bring students into the civil service when they enter a teacher training college, for example, are very costly. But they employ large numbers of well-educated youth, many of whom come from politically vocal families. Efforts to reduce these types of subsidies run into institutional traditions (often begun under colonial administrations) and concrete political resistance. At times, persuasive leaders can push beyond such resistance, as detailed in Vida Yeboah's discussion of Ghana's reform experience (Chapter 3).

In sum, rational planners of adjustment often focus on a discrete policy lever which, when pushed and pulled, should yield a concrete outcome (lower subsidies, budgetary shifts, or

more equitable distributional policies). But seemingly tidy policy initiatives often meet an unpredictable, hostile environment which erodes even short-run viability. And even policy adjustments that stick in the short run can be derailed by a hazy conception of where effects are to occur, related technical complexities, and relentless institutional resistance or inertia.

A Menu of Policy Choices

Governments and donors are eager to act — to expand schooling, to improve educational quality, to push for more efficient use of sector resources. The first generation of SAI programs now being implemented reflect an earnest focus on the novel intervention of policy adjustment. As mentioned above, we are more intrigued with mounting the strategy and arranging new sets of inputs than with understanding the resulting effects. Not knowing just how alternative adjustment strategies yield differing outcomes, we continue to define the field only by the menu of actions taken at the front end of the process. This is rather like defining agricultural production only by examining isolated inputs, leaving out human and material facets of the technical process and ignoring the varied quality of outputs. Notwithstanding this definitional weakness, a brief review of sector policy interventions is a useful exercise.

The chapters which follow illustrate how different elements from this menu have come together within country-specific adjustment programs. Figure 1.2 arranges possible policy and budget reforms into five categories. First, macro adjustment programs may pull the education sector into compliance with *broader political-economic objectives*. Efforts to contain government spending, for instance, may affect resources available to the education sector. On the other hand, where education receives an insufficient share of GDP or government spending, donors have advocated higher levels of spending. Economic or social policies aimed at changing the structure of opportunities — e.g., providing women with access to agricultural credit or other inputs — may place new external demands on the education sector. Turning to the education sector itself, adjustment strategies usually attempt to *contain costs* faced by central government. These measures include

reducing subsidies, greater utilization of school facilities, concentrating resources on children who are achieving, or employing new technologies to lower production costs (associated with producing instructional materials and new teachers).

Policy levers also have been identified which aim at more *efficient allocation of sector resources*. This includes shifting additional resources toward primary schools, when gains are most urgently required in basic literacy. Similarly, allocative efficiency is low when most resources are going to secondary and university levels, particularly when wage employment is limited or declining. Resources within subsectors also can be used more cost-effectively. For instance, there is now clear evidence on the positive achievement effects stemming from infusions of textbooks and basic instructional materials (Fuller 1987). Yet throughout Africa very few resources remain for these essentials, after allocating monies for teacher salaries and administration.

Inventive policy reforms have been suggested to help *diversify sources of school finance*. Few African governments can afford to keep pace with skyrocketing social demand for schooling. Many governments already encourage local communities to contribute cash, labor, and/or materials to help cover capital and recurrent costs. But additional encouragement of private schools will be needed, particularly if governments are to conserve resources for maintaining even minimal levels of educational quality.

Finally, donors and governments increasingly are discussing how to create *stronger incentives for teachers and headmasters*. Little information is available on actual achievement levels of pupils. Progression through primary school often is used as a proxy for "performance." But this tells us little about children's achieved levels of literacy. National examinations are used as selection devices; they are not seen as tools to assess attainment of minimal literacy levels. In much of Africa, headmasters and teachers are expected to mechanically perform their jobs, often working in isolated settings. In the absence of incentives for professional development, the motivation of headmasters and teachers often is quite low. Borrowing from colonial patterns, school inspectors are seen as regulators who can exact

penalties but offer little assistance in actually improving pedagogy or school management. In addition, headmasters and teachers are accountable to central government regulations and dictates, but incentives are decoupled from actual pupil performance or to demands expressed by the local community. School finance schemes and salary incentives could adjust incentives to encourage better teaching and community-level accountability.

The columns in Figure 1.2 provide three dimensions for contrasting the different policy initiatives. The location of impact for each item is fairly obvious. Yet policies aimed at local levels, in contrast to central government adjustments, call for very different implementation methods and bring forth different technical and political complexities. Our judgment on comparative levels of institutional resistance and technical complexity are rough at best. Precise levels of resistance and complexity, of course, vary across countries and policies. Our judgments are based on written reports and our own experience in-country.

A diversity of policy options. This particular framing of alternative policies — looking at them from three different angles — illustrates the wide variation in the nature and location of intended effects, and emphasizes that implementation processes also differ depending on the desired impact. In shaping sector adjustment strategies, SAI designers must spend considerable time in negotiating viable agreements with governments. Long-term technical and institutional constraints on actual implementation receive much less attention. Only rarely do we think systematically about how these hindrances to effective sector adjustment vary across different types of policies.

Within particular countries, these alternative policy ingredients are mixed together in various ways. Early sector adjustment operations focused on containing government spending, pinpointing where budget cuts could be accomplished without narrowing educational access or quality. In both Ghana and Senegal, for instance, subsidies for university student housing and auxiliary services were reduced. Other sector adjustment activities are now creatively balancing budgetary reductions with incentives for local improvement. The World Bank program in Malawi, for example, inventively provides support to primary educa-

Figure 1.2
Educational Policy and Budget Items

	Impact Location	Institutional Resistance	Technical Complexity
1. Fitting the Sector to Economic and Political Priorities			
Slow sector spending to free capital and contain inflation; or raise sector spending to boost productivity and social objectives	Central	■	■
Limit growth in the teaching force to contain the civil service wage bill	Central	■	■
Reduce cost of imported school inputs to conserve foreign currency	Central	■	■
Shift tax burden for vocational training to the private sector	Central and local	■	■
Implement more equitable pricing policies, lowering subsidies for higher-income parents or for teachers (e.g. housing subsidies)	Central	■	■
Open opportunities for females in the economy and education sector, to raise their productivity in agriculture and the informal sector	Local	■	■
2. Containing Education Sector Costs			
Fully utilize school facilities thru double-shifts, multigrade classes, admission of day pupils (secondary schools and universities)	Central and local	■	■
Reduce boarding subsidies that benefit more advantaged pupils, including secondary or university pupils who will gain higher earnings	Central	■	■

KEY: ■ = High ■ = Moderate or Low

Notes: 'Impact location' (column 1) refers to whether the policy adjustment intends to influence change within the central government, within local schools, or within private firms. 'Institutional resistance' may occur within any of these three institutions. 'Technical complexity' relates to implementing the policy change, independent of institutional or political points of resistance. Sources: Chapters by Ngaye and Yeboah (this volume), Mingat & Tan (1988), Wilson (1988), Windham (1988), World Bank (1988).

Figure 1.2 (continued)
Educational Policy and Budget Items

	Impact Location	Institutional Resistance	Technical Complexity
Limit the number of years of schooling defined as basic education	Central and local	■	■
Encourage early retirement of teachers and administrators in sub-sectors that are over-staffed	Central	■	■
Raise class size, especially at post-primary levels	Central and local	■	■
Bring the capital budget in line with sustainable levels of recurrent spending	Central	■	■
Introduce new learning technologies, including distance education programs for pupils and teacher trainees	Central and local	■	■
Develop teacher training programs that combine residential and more field teaching practice	Central and local	■	■
Adjust the structure of teaching service pay scales and rates of promotion to contain salary costs	Central	■	■
Adjust teaching service pay-scales to equalize incentives and status between primary and secondary school teachers	Central and local	■	■
Use teachers more intensively by increasing teaching hours, lengthening the school year, implementing double-shifts, and discouraging teacher absenteeism	Central and local	■	■
Cut school construction costs	Central	■	■

KEY: ■ = High ■ = Moderate or Low

Figure 1.2 (continued)
Educational Policy and Budget Items

	Impact Location	Institutional Resistance	Technical Complexity
Employ new technologies to reduce production costs of textbooks and instructional materials	Central and local	■	■
Reduce rates of pupil drop-out and grade repetition	Central and local	■	■
Raise pupil admission standards in secondary schools and universities where supply of graduates exceeds labor demand	Central and local	■	■
Track and reduce the number of 'ghost' teachers who have no school assignment	Central	■	■
Increase the ratio of teaching to non-teaching staff	Central and local	■	■
Reduce output of teacher training colleges when student demand is leveling	Central	■	■
3. Allocating Sector Resources More Efficiently			
Raise the proportion of recurrent sector spending allocated to essential textbooks and instructional materials	Central and local	■	■
Consolidate curriculum and focus instructional material expenditures on basic subjects (that are relevant to rural or urban needs)	Central and local	■	■
Allocate teachers to equalize pupil: teacher ratios across schools and grade levels	Central and local	■	■
Improve management information and accounting systems to track allocation of teachers, instructional materials, and capital spending	Central	■	■

KEY: ■ = High ■ = Moderate or Low

Figure 1.2 (continued)
Educational Policy and Budget Items

	Impact Location	Institutional Resistance	Technical Complexity
Conduct research to identify those school inputs and classroom practices that effectively boost pupil achievement	Central and local	■	■
Adjust the school calendar to avoid peak periods of labor demand (during the day or year), lowering the opportunity cost of staying in school	Local	■	■
4. Diversifying Sources of Finance (lessening public sector burden)			
Raise student fees at secondary and university levels, reserving a portion of revenue for pupils who cannot afford to pay	Central and local	■	■
Encourage community contributions to school/classroom construction and recurrent costs	Central and local	■	■
Create book user-fees and revolving funds to support textbook production (especially at secondary and university levels)	Central and local	■	■
Deregulate government controls over private schools	Central and local	■	■
Provide government incentives to pupils and teachers in private schools, when cost-effective in expanding school places or improving quality	Central and local	■	■
Encourage local, private production of school furniture	Central and local	■	■
Create student loan schemes for university students	Central and local	■	■

KEY: ■ = High ■ = Moderate or Low

Figure 1.2 (continued)
Educational Policy and Budget Items

	Impact Location	Institutional Resistance	Technical Complexity
5. Creating Incentives for Teachers and Headmasters			
Improve national examination systems to provide feedback to schools on educational quality, controlling for differences in pupil background	Central and local	■	■
Link a portion of teacher salaries to performance in the classroom	Central and local	■	■
Link a portion of teacher salaries (or stipends) to participation in inservice training	Central and local	■	■
Create 'master teacher' roles within schools to encourage professional achievement and development	Local	■	■
Support secondary and university schooling through student scholarships or vouchers, boosting accountability of headmasters and teachers	Local	■	■
Decentralize certain management functions to encourage local responsibility and accountability	Central and local	■	■
Change the role of school inspectors and headmasters to encourage improvement in pedagogy and professional development activities	Local	■	■

KEY: ■ = High ■ = Moderate or Low

tion, encouraging lower subsidies and stronger cost-recovery within the secondary and university subsectors. The Bank has matched additional recurrent expenditures for primary school textbooks, staying within the government's aggregate spending ceiling (negotiated with the IMF and the Bank). Policies aimed at building the capacity of district education offices and even headmasters, within the Malawi operation, also provide positive incentives for improvements in primary school effectiveness. Here the focus is on boosting pupil literacy, not only accomplishing discrete shifts in central budgets. Also within the joint World Bank/USAID program in Mali, budget reform at the center is balanced with technical assistance in village schools aimed at boosting the skills of headmasters and teachers.

Critical Questions

Our seminar brought together African government officials and donors who have been involved with this first generation of education adjustment operations. Participants brought their recent experience and a tentative list of lessons learned — from Ethiopia, Ghana, Lesotho, Malawi, and Senegal. The chapters which follow elaborate these specific country cases — and how a subset of policy initiatives are being implemented (or resisted) in particular settings. To the government representatives and donors who attended the conference, we put forward a set of questions that were debated throughout the two-day session. As you read through the country case studies, keep these issues in mind.

The context of long-term national development.

1. Africa's static economic growth and its attempt at economic adjustment: How does educational policy change contribute to macro economic remedies? What windows of opportunity are created for sector adjustment?
2. How does policy change contribute to the long-run objective of strengthening institutions and their leadership within?
3. How can sector adjustment and investment strategies serve long-run national aspirations? How will social and economic aspirations shape educational priorities, independent of rationalized adjustments?

Policy choices and implementation.

4. How can sector policy and budget change more directly affect educational quality and pupil achievement at the school level?
5. How do alternative policy initiatives differ in terms of intended effects and likely constraints on successful implementation?
6. What are the critical conditions and key factors that contribute to effective policy adjustment?
7. Are first-generation SAI operations sending cohesive, consistent signals? Or are they overly complex and occasionally contradictory (for instance, urging school expansion and quality improvement simultaneously)?

Future Improvements

8. Second-generation SAIs are now being designed by governments and donors. Can these efforts encourage more ownership and broader support within countries? Are we learning anything about how policy levers can yield stronger positive effects at the school level?
9. How monitorable are policy reforms? How do we disentangle discrete policy and budget interventions from on going economic and policy drifts which affect the education sector?
10. Are SAI strategies enabling governments to delineate their own policy choices and to develop information and evidence which informs alternative courses of action?

Each country case which follows will touch upon these issues. Our concluding section will put forward some responses to these questions, based on the discussion that occurred at the Washington conference.

Donors' eagerness to pursue policy change, though more tempered and realistic than was apparent within the earliest experiments, will not wane. Africa has been on the periphery of the world economy for centuries. Contemporary manifestations of this status — reliance on subsistence production, limited value-added manufacturing, and erratic commodity prices and terms of trade with the world economy — are not new to sub-Saharan Africa. The soaring level of foreign debt is a more recent facet of political-economy, and one that will continue to constrain capital investment and the potential for growth.

Thus the topic of macro-economic adjustment, and spending reforms specific to the edu-

cation sector, will move higher on the agendas of both governments and donors. Whether successive generations of "adjusting" will contribute to long-run improvement in human capacities remains to be seen. We should, at

the very least, inquire more carefully and in a hard-headed manner as to how costly policy experiments are touching the short-term capacity of governments — and the long-term effectiveness of local schools.

POLICY REFORM TO RAISE SCHOOL QUALITY *The Case of Malawi*

Edward Ngaye

Since winning its independence — just 25 years ago — Malawi has expanded schooling at a rapid pace. Primary school enrollments have tripled; the number of youth entering secondary school has risen five-fold. Enrollments continue to grow at 3.2 percent annually. Government remains committed to expanding access to basic education and increasing literacy.¹

Gradually, however, an awareness has grown that our success in expanding schooling presents new problems, particularly in maintaining minimum standards of quality and in using the sector's resources more efficiently. Downturns in the 1980s throughout the world economy reminded educators in Malawi that high aspirations for education must be balanced against resource constraints facing Government. Public spending on primary schooling, for instance, has risen just 0.6 percent per year (in real *kwacha* terms) since 1980. Given that enrollments are growing at over 3 percent, spending per pupil is declining at over 2.5 percent each year!

Government's National Development Plan recognizes that gains in basic literacy are essential for raising economic and social standards of living. Boosting literacy requires a balanced strategy aimed at expanding basic schooling and enhancing educational quality. This strategy will be effective only if (a) existing sector resources are focused on those inputs and practices that most directly boost pupil achievement, and (b) new sources of revenue and in-

ventive financing strategies are pursued.

Within this context Government began in 1985 to discuss with the World Bank a "policy action program" which includes a series of sector adjustments. This chapter will describe the elements of this scheme. Throughout my discussion I emphasize the importance of more careful planning within the education sector, including the formulation and broad discussion of policy alternatives and choices. I will not dwell on the merits or specifics of each policy element. Instead, the discussion focuses on the process by which ideas have been put forward (from inside Government and from donors). In addition, I raise the issue of how well-intentioned proposals actually play out within the broader social and economic environment. The paper is meant to stimulate thinking on how educational reform can occur within a process of planned change — taking into account the aspirations of a society or government.

Education Development Objectives

Government's policy objective for the education sector is to develop an efficient schooling system of a type and size appropriate to available resources and to the political, social, and economic goals of the nation. Education is seen as an important vehicle for promoting national consciousness and cohesion, and for furthering economic independence. Schooling is viewed as a means for reinforcing the high eth-

ical standards of Malawian society, essential if social justice is to be maintained in the face of economic progress. Education also plays a role in providing workers who hold skills that are in short supply, thereby aiding national development.

The Second Education Development Plan for the nation (1985-1995) spells out these priority functions of education. In pursuing these broad objectives, the Ministry of Education and Culture attempts to focus on three particular concerns: improving equitable access to educational opportunity, achieving a proper balance in resources allocated to different levels of instruction, and raising the efficiency of the educational system.

Identifying Key Constraints and Problems

Overall policy and budget actions must be in line with Government's development objectives. And policy improvements should address those pressing constraints that limit the education sector's capacity to achieve these objectives. Delineation of priority issues stems from lengthy dialogue with donors, and from Government's own recent review of the education service (conducted by Price Waterhouse). Principal problems facing the education sector include the following:

- **Population growth.** Child population appears to be growing at 3.9 percent a year, indicating that demand for formal and nonformal education will exceed supply for many years to come. Formulation of programs that ensure adequate access to education and training opportunities is essential. This will enable youth to play a catalytic role in the economic and social development of Malawi.
- **Limited resources.** Expansion of basic education will occur within tight resource constraints. We believe that the education sector has been underfunded relative to other sectors and that funding does not reflect schooling's potent contribution to economic growth. Both the Price Waterhouse team and the World Bank have suggested that the sector's share of recur-

rent government spending should increase from 11 percent to 15 percent by 1995. This goal is included in Government's current ten-year development plan, and has become an important ingredient of our policy action program.

- **Variation in access to basic education.** Disparities exist in the distribution of physical and human resources in the educational system. This is a situation that the Ministry intends to redress in our development programs.
- **Low internal efficiency.** The education sector is not as efficient as it could be, especially at the primary level. Repetition rates are quite high in most class levels, ranging from 5 percent to 42 percent. Only one-fourth of all pupils who enter will complete the full eight years of primary school.
- **Inadequate instructional materials.** Basic textbooks, teacher guides, and writing paper are in very short supply. Teachers report that just one Chichewa textbook is available for every four children. The ratio of students to pupil desks equals 13:1! Together, Government and Malawian parents (through fees) can afford to spend less than three kwacha per pupil on instructional materials annually. This covers the cost of one-half of one textbook (pupils are supposed to have three standard texts). The ratio of pupils per teacher has grown dramatically since 1970, rising from 41:1 to 67:1.
- **Insufficient places in secondary school.** The intake capacity of all secondary schools is only 7,000 pupils. But the number of pupils who pass the primary school leaving exam, and thus become eligible for a secondary place, now exceeds 60,000 each year. This means that only about 12 percent of qualified pupils are able to enter secondary school. This bottleneck is the direct result of inadequate infrastructure.

A Policy Action Program

Ministries of education are constantly discussing, and pushing for, possible policy change with other levels of government. Donors must recognize that their particular ideas for policy or budget reform are injected into institutions where many options already are being debated. In addition, forces outside ministries of education often are responsible for policy change. These "reforms" — resulting from external economic or political considerations — are simply beyond the control of the education sector.

Keeping in mind these two contextual points, let me describe major policy changes that have occurred, or continue to unfold, within Malawi's education sector. Several of these reforms have been negotiated with the World Bank in recent years. Others stem from the Government's own actions as we address the sector's major problems.

Organizational reforms. The Ministry is implementing several institutional reforms that cut across all levels of the sector.

1. Since 1977, all teachers have been part of the civil service, helping to raise their status and pay. In addition, Government has introduced new promotional grades for primary school teachers and headmasters (a T-1 ranking and three grades of diploma teachers). These adjustments to career ladders encourage longer tenure in the teaching service and provide incentives for higher performance.

2. The recent Price Waterhouse review recommended decentralization of certain administrative functions now controlled by the central Ministry. Many time-consuming problems, such as teacher leaves and pupil discipline cases, now must be decided by high-ranking Ministry officials. Decentralization of these functions would free time for "policymakers" to actually deal with major policy and fiscal issues. We are presently developing an implementation plan.

3. Previously two separate agencies managed national examinations. The Parliament recently approved legislation to consolidate these offices into one National Examinations Board, leading to reduced bureaucratic costs. The new agency is exploring ways of improving exams and administering them more efficiently.

4. The Ministry is attempting to strengthen commercial and vocational subjects at both primary and secondary schools. These efforts have run into problems: equipment used for training is not always appropriate, facilities are costly and not fully utilized. But a clear policy focus should lead to improvements in the quality of vocational instruction.

Quality and efficiency reforms. Several policy actions attempt to enhance educational quality and raise the efficiency of the education sector. These reforms also involve two or more levels of the system.

5. Efforts are being made to concentrate scarce resources on pupils who are successfully persisting through primary school. Almost half of all standard 8 pupils are repeating, trying to get into secondary school. Repetition at all standards increases class size and diverts resources away from pupils who are achieving at satisfactory levels. The Ministry is proposing that entry to secondary school be heavily weighted in favor of pupils who have not repeated. This adjustment to the incentive structure may improve the efficiency of the primary subsector.

6. Increased utilization of school facilities and stronger cost-recovery measures have been introduced. Government subsidies for boarding facilities, benefiting secondary school and university pupils, have been reduced. The Ministry is considering how more day students (non-boarders) can be enrolled in secondary schools. Double shifts of classes are being introduced on an experimental basis. Government has agreed to raise the pupil:teacher ratio at the university (which now stands at 7:1). The university has relaxed its policy requiring that all pupils be in residence and has already admitted 36 day students. These measures seek to expand educational opportunity at little additional cost.

7. Government has agreed to raise the proportion of education spending allocated to primary schools. This subsector exercises the largest impact on boosting Malawi's literacy rate. In turn, rising literacy should improve productivity and the social quality of life in rural areas. (Over 80 percent of Malawi's population reside and work in rural villages.)

8. The finance ministry has agreed to double Government's support of essential textbooks

and instructional materials. The Ministry will now cover about one-half the cost of these materials, with parent fees picking up the remaining cost.

9. The Ministry, working with the university, has embarked on a research program that aims to identify those school inputs and teaching practices that effectively boost pupil achievement. These findings will feed into the on-going dialogue on what policy and budget levers can directly improve school-level actions which increase basic literacy.

Primary school reforms. Several elements of our policy action program speak to particular subsectors. Let me highlight reforms specific to primary schooling.

10. The primary school curriculum is being revised to make it more consistent with our social-cultural environment. The number of subjects also is being reduced, allowing teachers to concentrate on a more manageable curriculum.

11. To increase educational access, the Ministry is proposing elimination of all fees for standards 1-4. Methods for implementing this proposal, particularly how Government will replace the loss in fee revenue, are now being discussed.

12. The Ministry is experimenting with different ways of upgrading the skills of underqualified primary teachers and cost-effective strategies for producing more teachers. A crash program to train 4,500 new teachers is being implemented. This effort involves a combination of training in residence, practice teaching in the field, and correspondence courses.

Lessons Learned

Discussion of these policy reforms began five years ago. The more complex process of implementation has been underway for just three years. Several tentative lessons have emerged as the Ministry of Education and Government push these basic policy and budget changes.

First, *only a few reforms should be introduced at one time.* The idea of policy adjustment is still novel. And the human capacity of ministries is fixed. Only so many fundamental changes can be taken on over a short period of time.

Second, *policy reforms should not be imposed from the outside.* True policy change requires

strong political will, technical innovation, and financial resources. These essential ingredients will come together only through strong, lasting collaboration between governments and donors. Participatory planning by all parties should be emphasized, through extensive consultation and open workshops.

Third, *policy change must be combined with positive incentives.* These adjustments often create anxiety, as change occurs in fee structures and budgetary allocations, or locally in terms of school-level practices (regarding policies related to repetition or national examinations). Actors in the educational system should not be expected to change in the absence of incentives. Our policy action program therefore includes several positive incentives: efficiency measures open-up new places in secondary schools and the university; preservice and inservice teacher training is improved and stipends encourage participation; clearer rewards are provided to primary school pupils who progress at normal levels.

Fourth, *the policy adjustment process must be respectful of the nation's social, political, and economic aspirations.* For instance, donors are emphasizing the importance of educational quality and using scarce sector resources more efficiently. But gains in this area must be balanced against expanding access to basic education. Just 40 percent of all children in Malawi are enrolled in primary school. Improvements in quality will benefit only the relatively few children who actually enter school. The society's aspiration for universal access to schooling also must be addressed.

Fifth, *local communities and parents must be involved in the policy reform process.* At a minimum, local villages should understand why changes are occurring, for instance, modifications in the fee structure or in the curriculum. To take another example, we cannot simply decree that pupil repetition rates will be reduced. Central ministries must work with parents, teachers, and headmasters if school-level practices are to be improved.

NOTE:

1. This paper was originally presented at the USAID/World Bank seminar on Educational Policy Adjustment held in Washington. This paper does not necessarily reflect the official policies of any institution.

GHANA'S POLICY ADJUSTMENT INITIATIVE

Opportunity for Renewal

Vida Yeboah

"The process of policymaking is not simple. . . it involves, for example, having thousands of students protesting outside your office, asking why you are working with the World Bank on budget reforms (including cuts in government subsidy of pupil boarding costs)."

— Dr. Ebi Sutherland Addey

Deputy Principal Secretary for Education, Ghana

In 1987, after a decade of institutional erosion, the Government of Ghana embarked on a broad program aimed at revitalizing our educational system. The initial thrust was to entitle every child to nine years of basic education, through junior secondary school. But the reform effort has become more ambitious, addressing issues of access, educational quality, and resource efficiency.

Within Government's broad efforts to renew the educational system lay several policy adjustment measures. These policy and budget actions realign government subsidies of schooling in more equitable ways, as by encouraging higher quality basic education for the country's poorest families. Working with international donors, Government also is attempting to manage more carefully budgets and expenditures of various educational institutions. We are trying, against considerable opposition, to reduce unnecessary or inefficient expenditures. This includes cutting salaries for non-teaching staff, containing growth of the teaching force, and scaling back subsidies of secondary school and university students when they can afford to cover a portion of instructional and housing costs. We are reallocating the resources thereby conserved to increase the availability of essential instructional materials, including textbooks, exercise books, and writing paper. By generating cost savings on one side, we also free up resources to expand in-service teacher training.

Ghana's relentless economic decline, deeply felt since the mid-1970s, seriously undercut earlier progress in the education sector. Government's eventual decision to tackle sobering adjustments to economic and public finance policies, however, has provided a window of opportunity to move on our broad restructuring of the educational system. Policy and budget adjustments have been very difficult and painful. But they have sparked Government's long-term initiative to revitalize schooling.

Background

The desirability of serious educational reform — improving the basic institutional structure, content, and patterns of finance and subsidy, and content — had been recognized in Ghana for 15 years. Indeed, in 1974, the organizational and budgetary changes now being implemented were first detailed in the Dzobo Committee Report and approved by Government ("The New Structure and Content of Education for Ghana"). A consolidated education service was created in that year in response to the Dzobo Report.

Due to previous governments' lack of resources and political will, however, other major recommendations were not taken up. They simply languished for the following decade and a half. By 1983, Ghana's educational system had sunk to very low levels. The symptoms of decline were severe:

- Given the mass exodus of well-trained teachers from the country, half of all primary and secondary teaching posts were filled by untrained or unqualified teachers.
- Enrollment increases had declined to well below growth in child population. Primary school enrollments were rising at just 1.5 percent per year, and even less at the junior secondary level.
- Successive governments severely cut back on resources allocated to basic education. The proportion of GDP devoted to education fell from over 6 percent to just 1 percent between 1976 and 1983. In 1985, real spending on education equaled only one-third the level of resources allocated ten years earlier.
- Most school children were without textbooks, paper, and pencils.
- School buildings and furniture had thoroughly deteriorated, given scarce resources for maintenance and replacement.
- The sector was devoid of any data and statistics necessary for describing the educational system, let alone planning for the future.

In 1983, the present government decided to take strong action to arrest this surprisingly rapid decline of the educational system. The new policy was implemented by the Provisional National Defense Council (PNDC) under the broad Economic Recovery Program. In 1986, Government pursued more focused discussions of policy and budget reforms specific to the education sector. Top political leaders acknowledged that development of Ghana's human resources was a vital prerequisite to social and economic growth.

As a result of these high-level deliberations, the new Education Reform Program was drawn up to ensure that national educational goals could be realistically met. Emphasis was placed on increasing access to, and boosting the quality of, basic education. We also intended to make basic schooling more relevant to the people's socioeconomic conditions. The program was designed, from its inception, to be sustainable after an initial period of policy

adjustment. We did not want to be dependent upon donor resources once these significant shifts in structure, policy, and budget were undertaken.

Ghana's Reform Program

The education reform package implements significant changes at all three levels of schooling — primary, secondary, and the university. In addition, adjustments were made in teacher training institutions and within the organization of nonformal education.

Basic education. The Education Reform Program, announced in 1987, implemented a major change in the system's basic structure. We moved from 17 years of primary and secondary schooling (6-4-7) to the more typical 12 years (6-3-3). At the same time, Government declared that all children are universally entitled to nine years of free basic education, through junior secondary school. Our objective in reducing the length of secondary school was to lower the opportunity cost of keeping children in school — a cost that had been quite high for many parents.

The following principles formed the foundation of our reforms in basic education:

- Government's affirmation of the major policy decision that every child, age 6-15, has the basic right to be able to read, write, and function usefully in society.
- The participation of every Ghanaian is extremely important if the country is to develop. But, sadly, most Ghanaians are cut off from participation because they are either illiterate or have been miseducated and are unable to realize their potential.
- Every Ghanaian needs a sense of cultural identity and dignity. Our country has a heritage of individual ethnic cultures and of promoting a unified culture of Ghana to ensure a sense of national identity. As the nation grows stronger, people will be more proud of themselves and their society. A proper cultural identity will free our minds from dependence on the cultures of other people.
- Since education has not been relevant to their situation, many youth leave school and cannot find work.

- Today's world is a scientific and technological one; even a minimal education must tune every child's mind to this fact if he or she is to live competently.
- Every Ghanaian must be taught about his or her environment. Problems such as deforestation, low agricultural productivity, and widespread disease will be minimized if Ghanaians are taught how to prevent these afflictions as a part of their basic education.

The nine-year basic education program is terminal for many children. Some school leavers may enter apprenticeship or other training. Many youth will continue on to junior secondary school after completing the primary standards.

Senior secondary education. The traditional secondary school was sharply criticized for placing too much emphasis on academic work and for being far removed from local situations and national manpower requirements. The senior secondary program will seek to correct these defects and provide studies that promote individual and national development. The new senior secondary curriculum builds upon skills provided in basic education, then strengthens intellectual competencies and knowledge required for either higher level employment or university education.

Universities and tertiary education. In 1986, the Ministry of Education and Culture created a committee of experts to study the current institutional structure and its problems. The study's objective was to provide basic descriptive information and recommendations on medium-term development for university campuses and other tertiary training schools. Specifically, the committee focused on:

- the cost and pricing structure of universities and an assessment of where expenditures could be increased or decreased so as to improve allocational efficiency;
- assessing the demand for, and supply of, existing course offerings and recommending how costs could be cut through a more rational array of

courses; and

- reviewing the cost of finishing uncompleted buildings and improvements in university facilities.

The committee has made a full series of recommendations which Government is presently reviewing. In the meantime, Government has moved to reduce subsidies for instruction and housing for those students who can afford to share the cost burden. These policy and budget reforms have been painful and politically hazardous. But they demonstrate Government's resolve to make educational finance more equitable and to conserve public resources for basic education.

Nonformal education. Adult literacy programs have grown dramatically in Ghana since the late 1970s. This occurred, in part, due to rising drop-out rates in the formal school system. The reform program has attempted to rationalize management and contain costs in the nonformal subsector.

The first step was the creation of a formal Division of Nonformal Education within the Ministry. This allowed us to consolidate a wide array of programs that had arisen over the past decade to meet rising popular demand. As we see the social costs of adjustment ever more vividly in Ghana, the ministry is redoubling its efforts to boost adult literacy.

Teacher education. The reform program also seeks to improve teacher training institutions. Indeed, teachers constitute the key factor to the entire school improvement process. Much depends upon teachers' commitment and competence. Consequently, we are introducing into teacher education programs training in the new basic education course of study.

In the past, Ghana had both three- and four-year preservice training programs, depending upon the teacher candidate's prior level of schooling. Under the reform program, Government is phasing out the four-year programs. Beginning three years from now, the improved three-year preservice programs will admit only applicants who have completed senior secondary school. This means that new teacher trainees will have higher-level academic skills and more relevant knowledge when they enter the training college. At the same time, unit costs of graduating a new ba-

sic education teacher will decline. We expect that the teacher training curriculum will be more professional, focusing on pedagogical methods rather than spending time reviewing the primary or secondary school curricula (which trainees should already know).

Donor Collaboration and Funding

Government approached several international agencies in 1986, seeking their support and financial backing for the Educational Reform Program. By late 1987 we had successfully negotiated with the World Bank what became known as the *education sector adjustment credit* (or EdSAC). A major component of EdSAC involved the series of policy and budget adjustments which helped to reinforce Government's broader program.

As summarized at the beginning of this chapter, these policy measures realign Government subsidies of education in more equitable ways, encouraging higher quality basic education for the country's poorest families. Unnecessary or inefficient expenditures on student housing, salaries for non-teaching staff, and the old lengthy secondary system were cut significantly. Government is attempting to manage more carefully budgets of various educational institutions. As we conserve budget resources, we can raise spending on instructional materials, including textbooks, exercise books, and in-service training.

This agreement with the World Bank on policy adjustments helped draw resources not only from IBRD (US\$34 million) but from bilateral donors as well, including Norway, Great Britain, Switzerland, and the OPEC fund. The Ministry is now beginning to implement a second budget support and technical assistance package financed by the Bank and USAID.

Implementation Process and Constraints

Prior to announcing the reform program, six months were spent planning steps toward implementation. The Ministry of Education and Culture led this process of laying out the basic strategy, then articulating concrete implementation tasks. Our basic management data were sketchy — pertaining to the teaching force, enrollments, and even the location of primary

and secondary schools.

A public information campaign was undertaken during the first three months of 1987. We described to numerous groups the state of basic education and explained why the Education Reform Program was necessary. As mentioned above, several policy and budget adjustments were not easy, undercutting the interests of well-established groups in Ghanaian society. We therefore wanted to carefully and persuasively articulate our goals and the specific changes being undertaken within the Ministry.

In late 1987, the first tranche of funds from the World Bank and co-financiers was released. This financing recognized our success in adjusting subsidy and pricing structures in the sector. Of equal importance, these funds allowed us to intensify work in the following areas:

- Finalizing the curriculum development strategy for junior secondary schools;
- Producing exercise books and stationery;
- Publishing textbooks within Ghana;
- Procuring teaching materials for basic science, agriculture, and technical training;
- Initiating inservice training for junior secondary teachers;
- Setting up distribution systems for the new instructional materials;
- Preparing new inspectors and re-vamping the supervision system; and
- Creating a new unit for project management.

In addition, a National Planning Committee was formed to help implement the junior secondary school program. Members were drawn from the education ministry, Ghana Education Service, the national teachers association, universities, and the National Service Scheme. Regional and district implementation committees were formed to facilitate improvements in the junior secondary schools. A national task force also was formed to work exclusively on logistical issues, linked to dissemination of instructional materials and the renovation of selected educational facilities.

Following a review of our progress, the second tranche of donor funds was released in mid-1988. We are presently working to complete the

transition to the three-year junior secondary school. This involves redrafting syllabi and some textbooks, and providing new equipment. In addition, we are trying to upgrade facilities at senior secondary schools.

Implementation constraints. The shortage of time represents a major constraint on our momentum. Since none of the policy measures seemed particularly new within ministry circles, we may have underestimated the time required to explain the reform program. Opposition to policy and organizational changes keeps recurring, requiring new rounds of explanation and argument. Major planning and implementation activities are coordinated by a relatively small group within Government. Implementation suffers when key members are pulled away to respond to political resistance and continual marketing of the program.

The structural adjustment program was initiated before we had time to improve basic management structures within the Ministry of Education and Culture. This process has proven quite complicated. In addition, the comprehensive reform program involved a sharp restructuring of junior and senior secondary schools. Even as Ghanaian parents were figuring out the nature of these new institutions, they were told that fees and prices would change significantly as well. Too many changes — both policy and organizational — may have been attempted simultaneously. We are now trying to consolidate the office that should hold authority for specific areas of reform. Originally many branches of Government were involved both in the education ministry and in the Ministry of Finance and Economic Planning.

In the past, the Ghana Education Service and the universities have operated as semi-autonomous units under the education ministry. The budget of each institution had grown in a rather uncoordinated fashion. Even where inefficiencies were apparent, the education ministry's authority to remedy the situation was ambiguous. We are now working with both organizations to set budgeting and manpower targets that help keep expenditures under control.

Another implementation constraint involves on-going opposition from vested interests. It has been possible to win gradually the support of those who had genuine fears about the changes, concerns resulting mainly from a lack of knowledge about the program. But other actors,

motivated by political or personal interests, continue to loudly oppose the reform program.

In a way, student protests against the reforms can be said to be motivated by a vested interest. The issue of cost-recovery involves removing boarding and feeding subsidies. This has generated numerous protests from university students who have refused over the years to consider alternative means of finance. Within the past year, these protests have led to closure of the university. The debate continues over how the cost of housing can be shared, lessening the burden placed on the government budget and increasing the equity with which education subsidies are distributed.

Other policy conditionalities have been difficult to maintain over time. The general freeze on the recruitment of untrained teachers still stands. This has been extraordinarily difficult, however, since rural education authorities have traditionally hired untrained teachers outside of the regular hiring process. We also have reduced the number of excess non-teaching staff within junior secondary schools. Generating cost savings, then ensuring that these resources are allocated for increasing instructional materials, is difficult politically and technically complex to implement. Central determination of these policy changes is the critical first step. Long-term implementation, and the perseverance required, have proven just as problematic.

In Summary

The period of planning and implementation, as described above, has been long and fraught with unanticipated difficulties. We have learned much about trying to simultaneously adjust policies, budgets, and school structures. Shifting the organization of central ministry management, while at the same time reaching out to various public constituencies, also has proven very difficult.

Despite these complexities and constraints, the PNDC government is committed to fully implementing the Education Reform Program. This will ensure that our educational system ceases to promote only the interests of the few. Instead, we are making basic schooling more accessible to more people at increasingly higher levels, enabling Ghanaians to develop their own capacities and thus accelerate development of the nation.

SOCIAL AND POLITICAL CONSTRAINTS ON EDUCATION REFORM

The Case Of Senegal

Birger Fredriksen

This chapter reviews Senegal's efforts during the 1980s to accelerate the development of primary education, mainly through policy reforms aimed at allocating scarce resources more efficiently. I introduce this discussion by describing the general development of education policy in Senegal during the 1980s. Yet I focus on issues related to the preparation and implementation of the education policy package promoted through the Primary Education Development Project (Education IV), supported by the World Bank and the African Development Bank.¹ The discussion highlights social and political constraints faced by governments in countries such as Senegal in their attempts to introduce education policy reforms. The chapter concludes by suggesting lessons that may be drawn from the Senegal case.

The Setting

Developments up to 1980. Despite Senegal's traditional role as a center for education and training in French-speaking West Africa, at independence development of primary education (27 percent gross primary enrollment ratio in 1960) was well below the sub-Saharan Africa (SSA) average of 38 percent.² Senegal's reputation as an education center derived mainly from its institutions of secondary and higher education which, during the colonial period, served not only Senegal but most other French colonies in West Africa, particularly the Sahel.

However, at independence, enrollment ratios were modest at these levels of education as well — 2 percent in secondary education and 0.5 percent in higher education, as compared to SSA-averages of 2 percent and 0.2 percent, respectively.

During the first two decades of independence, Senegal made major strides in developing primary education, despite weak economic growth (GDP per capita *declined* at an average annual rate of around 0.5 percent between 1965 and 1980). Strong factors fueling the growth in the supply of education included sharp increases in the overall Government budget (from 8.4 percent of GDP in 1960 to 20.3 percent in 1980) and in the share devoted to education (from around 15 percent in the early 1960s to 23.5 percent in 1980). Together, these two factors resulted in an increase in the share of GDP devoted to education from around 1 percent to around 5 percent during this twenty-year period.

Despite the fact that these efforts permitted a tripling in the number of primary school pupils during the first two decades of independence, the gap in coverage of primary education between Senegal and the rest of SSA widened. As a result, Senegal entered the 1980s with a primary enrollment ratio of 46 percent, compared to the regional average of 73 percent.

Recommendations of the Education Commission. The slow development of primary education, combined with factors such as dissatisfaction on part of parents with educa-

tion content, desire to give national languages a more important role as a means of instruction, and budgetary constraints led the Government in January 1981 to convene a major national conference (*les Etats Généraux*) on the future of education in Senegal.³ This conference made recommendations regarding:

- the creation of a "new school" that would gradually lead to universal education for the age-group 3-16 years;
- the resources required to implement this new policy; and
- the training and conditions of employment of education personnel, particularly teachers.

These recommendations were adopted by the Government in February 1981, and a National Commission on the Reform of Education and Training (CNREF) was established to work out the details of the reform as regards objectives, resources and structure of the new school. The Commission made its recommendations in July 1984; these were approved with minor modifications by the Government in January 1985.⁴

The recommended reforms aimed to make the educational system more equitable, efficient and responsive to national development needs. One key objective was to attain, by the year 2000, 30 percent enrollment for the age-group 3-6 years, and 100 percent enrollment for the age-group 7-16 years. Within the latter, the group 7-12 years would be taught in regular schools to be provided at the village level, while education for the group 13-16 years would be provided in local centers and would rely heavily on cooperation with local production units in the traditional and modern sectors.

Key sector issues in the mid-1980s. While these policy reforms were being detailed, the seriousness of constraints on future education-sector growth became even more evident. First, while enrollment in primary education grew at an average annual rate of 6.8 percent over the period 1980-85, resulting in an increase in the enrollment ratio from 46.0 percent to 55.5 percent, continuation of this rather healthy trend would not lead to attainment of the target of

universal primary education by the year 2000. One main cause was accelerated growth of the child population (of primary school age), from 2.6 percent per year during the 1970s to a projected average annual rate of 3.1 percent for the period 1980-2000.

Second, the education sector's increasingly severe squeeze between rapidly rising costs and rigid budget ceilings made it clear that it might not be possible even to continue the past trend. The country's economic condition had worsened, unit costs in primary and secondary remained higher than in other low-income African countries, and the share of the Government budget devoted to education was as high as 26.5 percent in 1984. While there is no obvious ceiling for the share of public budgets that can be devoted to education, in practice each country has a threshold beyond which the financial burden of education may seriously cripple the supply of other public services. And in light of the increasing burden of debt service, it could be argued that this threshold was being approached in Senegal.

Third, while the Government was able to increase the share of the education budget devoted to primary education from about 40 percent in 1980 to 46 percent in 1985, it became apparent that further reallocations in favor of primary education would be necessary in order to maintain sufficiently high enrollment growth. This would imply continued containment of expenditures in higher education, particularly of student subsidies which in 1985 accounted for 36.5 percent of the higher education budget (25 percent for scholarships and 11.5 percent for campus services providing subsidized meals, lodging, transport, and medical services). Sixty percent of all university students received financial assistance. Over half of the scholarship budget was for study abroad, the per-pupil cost of which was five times higher than at the University of Dakar.

Fourth, education quality was low and declining at all levels. As regards primary education, the success rate at the primary school leaving examination declined from 59 percent in 1966 to 42 percent in 1983. The factors adversely affecting quality included: *poor learning efficiency* due to severe shortage of textbooks and other training materials, overcrowded classrooms in urban areas (in 1983-84, 27 percent of urban classrooms had between 70 and

120 pupils), a short effective school year (due to many holidays and long school vacations, even the official school year was less than 120 days), and inadequate physical facilities (about half of the classrooms had an insufficient number of pupil benches, and one quarter of the classrooms were in a state of serious disrepair); *overly academic content* of the curriculum and pupils' often limited comprehension of the language of instruction during the initial years of schooling; and *inadequate management and control at the regional level* due to a lack of means for inspectorate staff to visit schools and encourage good teaching performance.

In response to these constraints on the education sector, the Government developed a set of sectoral adjustment policies aimed at promoting the development of primary education through more efficient allocation and use of existing resources. The Government's strategy also included a number of actions to improve the quality and relevance of education, and fixed the year 2000 as the target for attainment of universal primary education, with an intermediate target of 60 percent at the end of the Seventh Plan in 1989. This strategy became an integral part of the Education IV, to which I now turn.

Adjustment Policies Promoted through Education IV

Education IV became effective in September 1987. Total project support equals US\$19.6 million, including \$5.3 million in co-financing by the African Development Bank. Although a traditional investment operation, the project illustrates the new type of policy-oriented programs which emerged in the World Bank's West Africa office during the mid-1980s. The adjustment measures promoted through the project are in most respects as comprehensive as those promoted through today's sectoral adjustment projects or through hybrids (programs that provide quick-disbursing funds released in tranches against progress in implementation of agreed-upon education reforms).

Education IV has two main components. The *investment* component focuses almost exclusively on primary education — development and printing of textbooks; strengthening of inspectorates, education planning and research capabilities, and project implementation capacities;

and construction and rehabilitation of classrooms.

The *policy component* has two main elements. The first includes measures designed to increase primary school enrollment through reduction in unit costs by means of more efficient use of teachers and facilities. The second element includes measures aimed at containment of expenditures in post-primary education and reallocation of the savings to primary education while maintaining the share of the Government's budget devoted to education at its 1985 level (23.2 percent).⁵ More specifically, the measures included in each of these two elements are as follows (the description below is based on the Staff Appraisal Report).

Reduction of unit costs. This element includes five measures, four of which are directly related to the training and use of primary school teachers:

1. *Recruitment of candidates into primary school teacher training programs at an instituteur-adjoint/instituteur ratio of 80:20* as of the start of the 1986-87 school year.⁶ In 1984-85, 47 percent of the primary school teachers in Senegal were *instituteur-adjoints* and 53 percent *instituteurs*. The objective of this measure is to reduce unit costs since the salary difference between the two category of teachers is about 30 percent.

2. *Redeployment into teaching positions of 400 primary school teachers holding administrative posts in inspectorates and secondary schools* — 200 persons would be redeployed during 1986-87 and 1987-88, and 200 during 1988-89 and 1989-90.

3. *Introduction of double-shift teaching in urban areas and multi-grade teaching in rural areas.* The former system was to be tested in 75 classrooms during two school years starting in 1987-88. The system chosen would include reducing the number of weekly curriculum hours for students and increasing the teaching load for teachers, so that one teacher, using one classroom, would teach two groups of pupils, one in the morning and one in the afternoon. The system would gradually be applied in Grades 1-4 and was estimated to allow about 20,000 additional pupils to gain access to primary education by the end of the project (1994). Multi-grade teaching would be experimented with in 25 classrooms. Teachers involved in these two types of teaching would receive a salary increase of 25 percent.

4. *Increase the pupil-teacher ratio in primary school teacher training colleges from 7:1 to 15:1 by merging two existing colleges by 1987-88, and two more prior to 1988-89.*

5. *Increase student-teacher ratios and reduction in operating costs of specialized civil service training schools.* Complete feasibility study and implement plan by February 1988. Consolidate schools as per plan of 1988-89.

Containment of expenditures in post-primary education.

6. *Reduction of subsidies to higher education by: reducing the scholarship budget from the 1985-86 level by 8 percent in 1987-88, and by 3 percent annually from 1988-89 through 1994-95; establishing a cost-recovery system for higher education based on a feasibility study (to be completed by June 1988) on the introduction of a student loan system, which would be tested by making a few loans to third- and fourth-year students during 1988-89 through 1990-91, and by evaluating the percentage of loan recovery between 1991 and 1993; and reducing indirect subsidies to higher education, meaning that the budget for the University of Dakar Campus Services would be reduced in real terms from its 1985-86 level by 8 percent from 1987-88 through 1994/95, and also that a survey would be conducted by March 1988 on cost reduction measures to be introduced for the provision of essential services, including privatization of certain services and cost-recovery methods.*

7. *Establishment of ceilings on budgetary growth for recurrent expenditures on central administration and on secondary and higher education.* Limits equal to one percent annually for central administration and higher education, in real terms, and up to 1.5 percent annually for secondary education (both rates in real terms). A study on cost-saving measures in secondary and higher education would be completed by January 1988.

General Elements of the Policy Package

It was estimated that implementation of the above policy package would allow for an additional enrollment increase of 180,000 pupils, or 31 percent, between 1987-88 and 1994-95. In monetary terms, the cumulative cost savings over the project period would correspond to

about 80 percent of the primary school budget in 1985-86.

Apart from monitoring project implementation during regular supervision missions, the Credit Agreement called for the organization of two special implementation reviews (in June 1988 and June 1990) to assess progress in achieving the targets of the adjustment program. Disbursement on 350 of the 400 classrooms to be financed under the project would be conditioned on satisfactory implementation of the policy program; funds for 175 classrooms would be released following each of these reviews, implementation progress permitting.

Before reviewing progress in implementing the above program, three aspects related to its formulation should be emphasized. First, the criteria for the June 1988 and June 1990 implementation reviews include a number of activities other than the seven sets of measures described above. These other activities relate mainly to the strengthening of institutional capacities in areas such as: (a) facilities planning and maintenance, construction management and procurement, and design of construction techniques for durable, low-cost primary school classrooms; (b) education planning and cost control; (c) education research and development of textbooks; and (d) decentralized education management. These measures are closely related to implementation of the project's investment program.

Second, all reforms included in the program were designed to be implemented gradually: for example, redeployment of administrative staff into primary schools would take place over a period of four school years; curriculum reforms, textbooks, use of double-shift and multi-grade teaching techniques, and introduction of low-cost classroom construction techniques were all to be properly tested prior to implementation. To facilitate development of these measures, several studies would be conducted and financed under the project.

Third, while practically all the project investments benefitted primary education, many of the most difficult reforms — particularly those calling for budgetary containment — would affect post-primary education. As we shall see, this has become a serious problem during project implementation, particularly after a separate Ministry of Higher Education was established in early 1988.

Implementation Progress and Difficulties

There was a time span of almost two years between appraisal (October 1985) and implementation (September 1987), suggesting that the project became effective nine months later than anticipated. While this delay resulted in a corresponding implementation delay for some policy measures, the introduction of others started well before project implementation. The two tranche release reviews related to the classroom construction program were held in June 1988 (as scheduled) and in December 1989. For reasons explained below, the latter was six months ahead of schedule.

The main conclusions of the Bank team which conducted the June 1988 review were that: (1) although performance differed markedly among individual measures, on balance implementation of the five measures designed to reduce unit costs were ahead of target levels; and (2) implementation of cost-containment measures for post-primary education, while lagging, was generally in line with overall targets for the 1987-88 school year. Thus, the mission recommended that subject to reservations (explained below) the second tranche for the school construction program be released.

However, at the same time, the mission noted several disturbing aspects in current trends and warned that, in the absence of corrective measures, achievement of the main objective of the project, especially accelerated development of primary education, would be threatened. Before discussing these warning signals, I briefly review implementation performance for each policy adjustment measure.

Measures 1 and 4. Progress had been limited in reducing the share of instituteurs in the teaching force and in increasing the pupil:teacher ratio in primary teacher training colleges. This was largely due to the Government's financial inability to recruit teachers which, in turn, led to sharp reduction in admission into teacher training programs. New entrants are pre-recruited as teachers upon entry into the programs; consequently, new admission depends on the number of vacant/new budgetary positions available. Although the consolidation of training colleges had progressed as planned (two out of seven colleges were closed), the av-

erage pupil:teacher ratio remained a low 8:1.

The review team concluded that, in fact, the target of 15:1 could not be reached under existing teacher recruitment policies and that it would be wrong to further reduce teacher training capacity, since this would be required in order to cater to the planned enrollment growth in primary education once the benefits from double-shift teaching and staff redeployment had been reaped. The annual output of primary school teachers was down from a high of 1,379 in 1980-81 to 159 in 1988-89, which was less than the minimum of about 200 new teachers needed annually just to compensate for attrition.

The limitation on teacher recruitment has turned out to be one of the key problems in the adjustment program supported through Education IV. The limitation derives from the overall constraint on civil service recruitment established under Senegal's macro-economic adjustment program.

Measure 2. Redeployment to teaching duties of teachers engaged in administrative tasks had gone beyond the initial target. A total of about 1,270 persons had been redeployed as against the target of 400.

Measure 3. Introduction of multi-grade and double-shift teaching also was well ahead of schedule. Double-shift teaching had been introduced in 712 classes (82,927 pupils), and multi-grade teaching in 147 classes (7,984 pupils). Net enrollment gains in 1987-88 due to these two measures has been estimated at some 40,000 pupils. This corresponded to 7.2 percent of the enrollment in public schools, and resulted in savings of about 580 teachers (5 percent of the teaching force) and 786 classrooms.

Measure 5. The study aimed at identifying ways of increasing pupil:teacher ratios in specialized civil service training schools had not been launched, and only limited progress had been made in developing adjustment measures in this sector (two institutions — the *Centre de Formation et de Perfectionnement Administratif* and the *Ecole Nationale d'Administration et de Magistrature* — were merged in October 1986).

Measures 6 and 7. One main problem in reviewing progress in attaining the budgetary targets for post-primary education was that the monitoring system required was not yet fully in place at the time of the June 1988 review. The need to establish a reliable monitoring system

stems from the fact that actual expenditures may differ from budgeted expenditures.

Another problem specific to the Senegal case is that the adjustment targets are established in real terms. But no price index is available designed to reflect price increases in the education sector; the consumer price index or the GDP deflator is generally used.

Keeping in mind the foregoing, the review team concluded that performance against targets set for the reductions in student subsidies over the two-year period had been quite good. Based on a GDP deflator of 8.4 percent for 1985-86 and 5.6 percent for 1986-87, the indicators for higher education appear in Table 4.1 (at appraisal, US\$1.00 = CFAF 360):

The smaller-than-projected decrease (in real terms) in the scholarship budget is a direct result of the widespread student unrest during

for the University (these are nominal increases). Taken together, the delay in launching the studies and the proposed budgetary increases suggested future problems in meeting the adjustment program's targets for containment of expenditures in higher education.

Second, the main objective of the project is to accelerate the development of primary education. As already explained, the number of primary school teachers to be trained and recruited would have to increase sharply in years to come in order for the enrollment ratio to continue to increase towards the target. To achieve this within the overall ceiling of civil service recruitment included in Senegal's macro adjustment program, a substantial reallocation of budgetary posts in favor of primary education would be required, mainly from outside the education sector.

Table 4.1
Higher Education Spending Trends

	1985-86	1986-87	1987-88	Percent real growth, 1985 thru 1987	
	(in billion nominal CFAF)			Target	Actual
Scholarships	2,159	2,159	2,419	-8.0%	-2.5%
Campus services	988	988	988	-14.5%	-14.5%
Dakar University	3,671	NA	4,252	2.0%	1.3%

the school year. The 1987-88 budget foresaw a freeze in nominal terms (a 14.5 percent decrease in real terms over the two-year period), but CFAF 260 million were added during the year to provide for scholarships for new students admitted to the university.⁷

Issues arising from the June 1988 review. The main conclusions of the review mission may be summarized as follows. First, despite the modest performance on containing the scholarship budget in higher education, the impressive performance on the cost-saving measures for primary education would satisfy agreed-upon policy conditions for release of the second tranche for the classroom construction program. Little progress had been made in launching the eight studies included in the adjustment program.

Furthermore, continued student unrest had led the Government to propose substantial increases for higher education in the 1988-89 budget, a draft of which was furnished to the review mission: 16.5 percent for scholarships, 35 percent for campus services, and 8 percent

In view of these two issues, the review mission recommended that the second phase of the construction program be released following a confirmation on the part of the Government that it would: (1) recruit a sufficient number of students into teacher training colleges as of October 1988 to staff the schools to be constructed; (2) within the limit of the ceiling on recruitment of civil servants stipulated in its adjustment program, transfer to the Ministry of Education a number of budgetary posts sufficient to recruit these teachers; and (3) given the increases in student subsidies proposed in the draft 1988-89 budget, confirm its commitment to the adjustment program targets for containment of expenditures in higher education up to 1994.

The second tranche of the classroom construction program was released in October 1988, following the Government's confirmation of its agreement to the above three points. In addition, the Bank agreed to the Government's request to advance the June 1990 review by six months so that classrooms to be

constructed under that phase would be ready by October 1990. The Government hoped to provide sufficient classrooms at the start of school year 1990-91 to enable the pupils who started in double-shift classes in 1986-87 to revert to single-shift classes upon reaching Grade 5.

Policy and Investment Implementation through 1989

A Bank review team returned to Senegal in December 1989 to assess progress toward fulfilling the policy conditions set for release of the third tranche. Three main conclusions may be drawn from its review. The first finding was positive, regarding ongoing progress in introducing double-shift and multi-grade teaching. The two other conclusions were cause for concern, as they confirmed the difficulty of containing expenditures on student subsidies in higher education and the danger of stagnating enrollment growth in primary education.

Double-shift and multi-grade teaching. The positive development with respect to increased use of these two teaching techniques has continued. At the start of 1989-90, double-shift teaching was used in about 1,000 classrooms, enrolling a total of 110,020 Grade 1-4 pupils. Multi-grade teaching was used in 221 classrooms, enrolling 11,647 pupils. This represents a 33 percent increase in enrollment in double-shift classes over the two-year period, while enrollment in multi-grade classes increased by 46 percent.

An evaluation of the experience with double-shift teaching was completed in June 1989. The study (based on a sample of 16 double-shift and 16 single-shift classes) concluded that: (1) pupil achievement was no lower in double-shift

classes than in regular single-shift classes; (2) teachers and parents generally have a negative opinion of double-shift classes, as they believe that the reduction in curriculum hours will decrease achievement — a negative opinion largely caused by lack of information on the probable impact of this approach on learning, and particularly prevalent among parents whose children were not enrolled in double-shift classes; (3) pupils in classes taught by *instituteurs-adjoints* had, on average, higher achievement levels than pupils in classes taught by *instituteurs*, whether in single-shift or double-shift classes — a difference not explainable from the survey data in terms of achievement levels; and (4) the positive impact of access to a textbook (reading or math) was greater in double-shift than in single-shift classes.⁸

In view of this positive evaluation of the impact of double-shift teaching on pupil achievement, and given the shortage of classrooms and teachers, the Government decided at the end of 1989 to extend the use of this method through Grade 6 for pupils already enrolled in double-shift classes.

Spending on post-primary education. The figures in Table 4.2 summarize the development of *actual expenditures* during the period 1986-87 through 1988-89 for key indicators of the adjustment program. As will be noted, some of the figures for higher education for 1986-87 differ markedly from the *budget figures*. Note that growth rates refer to a two-year period and are expressed in real terms.

These figures clearly show that, instead of decreasing, student subsidies increased at a very rapid rate. This tendency continued in the budget voted for 1989-90, which includes CFAF 3,456 million for scholarships and CFAF 2,343

Table 4.2
Secondary and Higher Education Spending Trends

	1986-87 (billion nominal CFAF)	1988-89	Percent real growth, 1986 thru 1988	
			Target	Actual
Central adm.	1,764	1,817	2.0	-5.1
General secondary	10,398	12,299	3.0	10.1
Scholarships	2,145	3,036	-6.0	33.4
Campus services				
- budgeted	1,725	2,028	-16.0	95.1
- actual exp.	2,162	3,737	-16.0	266.3
Dakar University	3,375	3,819	2.0	5.0

million for campus services (current prices). Furthermore, preliminary results of an ongoing study on the functioning of these services show that actual spending in 1989-90 would be about CFAF 4,124 million. The study also shows that, in early 1990, these services had accumulated arrears amounting to more than four billion CFAF. These were paid by the Ministry of Finance in February 1990. From now on the campus services will no longer be allowed to accumulate arrears. Indications are that the budget of Dakar University also has increased following the strike of the teaching staff in 1989.

The demand for higher education remains strong in Senegal as evidenced by a sharp increase in enrollment between 1988-89 and 1989-90 (from 14,833 to 18,800). There was also a marked increase in the number of students who received scholarships (from 5,439 to 6,490). In response to this demand, the Government has indicated its desire to open a second university at a new, unused campus constructed for this purpose several years ago in the North.

Stagnation in primary education. The gradual increase in the enrollment ratio for primary education (from 46.0 percent in 1980-81 to 55.5 percent in 1985-86, and 56.6 percent in 1987-88) came to a halt in 1988-89 (56.4 percent). The stagnation was caused by a sharp decline in the number of new entrants to Grade 1: from 121,390 in 1987-88 to 104,709 in 1988-89. This negative development took place mainly in rural areas where the enrollment ratio declined slightly to 34 percent.

The shortage of primary school teachers is a principal cause of this stagnation in enrollment. The number of primary school teachers declined by some 1.6 percent between 1987 and 1989 and, while reliable data are not available, many classrooms in rural areas (200-300 according to some sources) are empty due to lack of teachers. The decrease in the teaching force has, in turn, led to a decline in the share of the education budget devoted to primary education, from 47 percent in 1986-87 to 45 percent in 1988-89.

World Bank reactions. In its policy dialogue with the Government over the past two years, World Bank staff have consistently underscored the disturbing trends summarized above. As regards *higher education*, several activities are un-

derway to prepare an extensive joint review between the Government and concerned donors of policy and investment options. Studies foreseen under Education IV's adjustment program will constitute one important input to this review. As of April 1990, the Government had completed most of these studies. A second input will be provided by an education sector review prepared by France as the outgrowth of a donors' conference on education in Senegal as planned in 1990. A third input will be provided by several studies, especially on professional and technical education, conducted as a part of the preparation of a proposed Fifth Education Project. An agreement on the future development of the higher education sector is expected to play a crucial role in the Bank's decision as to whether or not to participate in the financing of such a project.

Given the Government's overall ceiling on civil service recruitment, the main problem for *primary education* has been to ensure a reallocation of budgetary posts in favor of primary education. In its discussions with the Government, the Bank has called for the recruitment of a minimum of 600 new teachers each year, including 200 to compensate for attrition. This minimum number has not yet been attained. However, within the framework of its Fourth Structural Adjustment Program (SAL IV), supported by the Bank through a US\$53 million credit approved at the end of 1989, the Government has committed itself to hire a total of about 1,900 primary teachers during the three school years 1989-90 through 1991-92. Given that the total number of civil servants would be reduced over this period, the importance accorded in SAL IV to the protection of primary education is noteworthy since primary school teachers would constitute about half of all new hires during these three years.

Because of the problems discussed above, the Bank decided *not* to agree to an early release of the third tranche for the school construction component. In addition to the fact that policy conditions for such a release were not fulfilled, it would be of little use to construct classrooms that might not be staffed. And the Government's decision to extend the use of double-shift teaching to all six grades of the primary cycle for those already enrolled in this system reduced the need for new classrooms.

Lessons Learned in Senegal

Drawing on our experience in Senegal and other Bank-supported education policy operations, this chapter concludes by reviewing factors that shape the success of such programs. I start by stressing a few key issues arising from the Senegal case.

The most important lesson learned from this case involves the difficulties of budget adjustments in higher education. This is particularly acute in countries such as francophone Sahelian countries where education systems generally are small, fairly costly, and essentially elitist, with primary education catering to mainly urban areas and post-primary education benefiting the urban elite. The explicit objective of recent Bank-supported projects in the Sahel, including Education IV in Senegal, has been to develop more equitable and relevant systems — where resource allocation is more efficient, where priority is given to quality improvements at all levels and to expansion of primary education, and where the development of higher education responds better to labor market demands.

Progress toward this objective has required cost-saving and resource reallocation measures that have a clear negative impact on the education benefits enjoyed by privileged groups. Since these groups are more vocal and influential than those who would benefit from the reallocations, governments often find it difficult to implement these types of policy measures.

While it is easy to agree that adjustment in higher education is a problem, it is more difficult to agree on what exactly must be done. In cases such as Senegal, many Bank staff argue that, given (1) low rates of primary enrollment and adult literacy, (2) open unemployment of most types of university graduates, (3) low quality of higher education (caused partly by distribution of limited resources over too many students), and (4) severe budgetary constraints, it is necessary to: (a) *contain enrollment increases* in higher education and reallocate new entrants toward fields that offer better employment prospects, and (b) use any additional resources available to the sector for *quality improvements*. This strategy recognizes the need to strengthen higher education in these countries but argues that, in the medium term, this should be done through quality improvements

rather than through enrollment expansion.

However, the implementation of this strategy is difficult for the reasons discussed earlier. And to be successful in a highly sensitive sector such as higher education, any adjustment measure would need to be based on a high degree of national consensus. This was not the case in Senegal where the adjustment measures proposed for higher education were hardly known to key players in the sector, let alone discussed and agreed upon.

The second major lesson concerns the difficulties in giving increased budgetary priority to primary education in systems characterized by strong demand for higher education, unrestricted entry for all high school graduates, and generous student subsidies. Education IV attempted to achieve this by establishing ceilings on growth in the budgets for post-primary education. The difficulties in implementing such a strategy in the absence of a national consensus, and a government that has sufficient political will and strength to defend it, have been clearly demonstrated.⁹

A third set of lessons concerns certain design features of the policy package. In general, the package included measures that were both necessary and sound from a professional viewpoint. However, from the perspective of implementation, it would have been better not to fix the budgetary target in real terms and devote more attention to the establishment of a monitoring mechanism for the adjustment measures. The problem of how to treat higher education in a project principally dealing with primary education has already been mentioned, as has the need for national consensus-building in the development of policy packages.

A fourth lesson is the need for flexibility on the Bank's side when assessing whether or not tranche release conditions have been met. In many cases, the conclusion is not obvious as progress on some conditions may have overshoot the targets in the policy matrix (e.g., introduction of double-shift teaching), while progress towards other conditions may be modest at best. This requires a clear understanding of the relative importance of the various policy conditions.

Finally, it should be stressed that most of the problems experienced in the Senegal case were directly related to the political difficulty of in-

roducing adjustment in higher education during a period of general fiscal austerity. The problems were not caused by weak implementation capacity in the traditional sense. As a matter of fact, the project has benefitted from the support of a strong project coordination unit, led by a capable director.

Improving the Policy Adjustment Process

The starting point for this discussion is that major reforms aimed at improving the efficiency and effectiveness of resource use in the education sector generally have important both short- and long-term effects on the lives of large segments of the population, as well as on the nation's prospects for social and economic development. Consequently, such reforms entail Government decisions that generally are *politically very sensitive*. For example, many reforms impact on the working conditions of teachers, who frequently constitute the largest single group within the civil service (sometimes 30-40 percent) and form the strongest and most vocal trade union. They also affect the lives of parents and pupils. In the Senegal case, important segments of both teachers and parents resisted the introduction of double-shift teaching.

Another example derives from the fact that reforms often implicitly or explicitly change the distribution of education costs and benefits among different population groups. This is a very important aspect since — as modern sector employment is becoming increasingly scarce and dependent on education qualifications — the benefits derived from public spending on education are becoming an ever more important determinant of the distribution of influence and wealth in the society. Consequently, factors such as selection criteria for admission and for awarding scholarships, reallocation of resources in favor of primary education, and location of education institutions become major political choices which directly affect the lives of various social groups. As a corollary, it is important, prior to the introduction of these types of policy change, to assess their likely impact on different population groups and, further, to ensure that this impact is properly monitored during implementation.

Because of the high political sensitivity and often profound long-term effects of education

reforms, it is crucial to their success that they be based on a high degree of consensus among the population groups concerned, and that their content is "correct" in terms of the desired long-term development effect. While the latter appears rather obvious, ensuring that reforms are professionally sound is not always easy considering the time pressures, resource constraints, and high degree of uncertainty often surrounding the preparation of projects. Furthermore, our knowledge as regards the most cost-effective way of achieving key education objectives is less than perfect. To minimize the risk of introducing reforms that later turn out to be misguided, several points must be addressed as serious policy dialogue begins and moves toward specific proposals:

- **Reforms must be based on thorough sector knowledge.** In many cases this means conducting a number of country-specific studies prior to the design of the reform package to be supported through a particular lending operation. The amount and nature of sector work required depends on the type of policy measures considered. For example, while measures to improve the external efficiency of vocational training programs will normally require thorough studies covering both the supply and demand sides of the market for the type of labor to be trained, the decision whether or not to introduce double-shift teaching in a country such as Senegal, where almost half the school-age population is out of school, would normally not require extensive studies.
- **Highly competent staff not only help to ensure development of sound reforms but also serve to establish credibility and trust between the two parties in the policy dialogue process.** It is difficult to overemphasize the importance played by an open and sustained policy dialogue in the development of a well-designed policy package. As indicated above, many required adjustment measures are painful. Planning these changes requires both significant breadth and

depth of sector knowledge and the capacity to identify and explore policy options in a collaborative fashion. In this process, negotiating skills are as important as technical skills.

- **Adjustment measures in the education sector must be consistent with overall macroeconomic policy objectives.** Sector staff must, therefore, work closely with the country economist to ensure such consistency. Once the pre-project sector work is completed, competent teams are in place on both sides, and initial policy dialogue established, work can begin on forging an agreement on a set of policy measures addressing the sector issues which have been identified. Several key factors determine whether a thoughtful and efficacious policy dialogue can be sustained. They center on *consensus-building*.

As wide a consensus as possible should be built regarding policy alternatives. Essential elements in this process:

- **Most sector work should be conducted by nationals**, assisted by short-term outside consultants if necessary. There are a number of reasons why this approach should be the rule. For example, the discussions that take place within the national administration during the preparation of policy-related studies are often more important to the development of a national consensus on policy changes than the reports themselves. In particular, this process helps ensure Government ownership of the policy package and plays an important institution-building role.
- **Most countries have, over the years, considered the introduction of reforms** that for a variety of reasons have not been implemented. Many of these represent policy changes that sooner or later would have to be in-

troduced and that, given present budgetary constraints and the urgent need for quality improvements, can no longer be postponed. Such past proposals constitute in many cases a good starting point for the development of an adjustment package.¹⁰

- **The policy package must be discussed and explained to the main parties involved.** This is a critical aspect in assuring acceptance of policy reforms. It is sometimes a delicate matter to discern the extent to which staff from donor agencies should be involved in this effort. Some governments clearly do not want outsiders involved in discussions with trade unions or students. What is important is to ensure that the Government conducts such discussions and explains the hows and whys of policy changes. For example, in the Senegal case, policy conditionalities on expenditures and scholarships in higher education were never really explained to students and staff at the university.
- **Donors' discussions of the policy package with the Government should not be limited to Ministry of Education officials** but, to the extent they touch upon cost, financing and labor market issues, should include representatives from ministries concerned with these issues, as well as representatives of private employers. One of the beneficial effects of current budgetary exigencies has been the realization by ministers of education of need for cost-effective use of the public resources under their domain.

Of the factors listed above, *consensus-building* is the most important prerequisite for successful implementation of difficult policy reforms. This is particularly true for policy reforms that require changes in *central and local behavior*, or that influence the *distribution* of education costs and benefits among different groups.

NOTES:

1. The project was appraised in October 1985 and became effective in September 1987.
2. If not otherwise indicated, all education statistics quoted in this chapter are derived from World Bank (1986) and World Bank (1988) as regards years prior to 1983, and from UNESCO (1989), *Ministère de l'Éducation Nationale* (1988) and other national sources for later years. Data related to economic growth are from World Bank (1989).
3. For a detailed description, see *Ministère de l'Éducation Nationale* (1986).
4. Cf. *Ministère de l'Éducation Nationale* (1986).
5. "Reallocation" is defined in relative terms in the sense that, over time, the budget for primary education would grow faster than those for other levels of education, resulting in an increase in the share of the total education budget allocated to primary education.
6. These two grades are common for primary school teachers in francophone African countries. The *instituteur* is the highest grade and normally has (as in Senegal) four years of training in a teacher training college following completion of lower secondary education (Grade 10), or one year of teacher training following completion of upper secondary education. The *instituteur-adjoint* has one (as in Senegal) or two years of training following completion of lower secondary education.
7. The 1987-88 strike of students in public secondary and higher education in Senegal began on October 15, 1987, at the start of the new academic year when pupils at a secondary school in Thies demanded the reinstatement of one of their colleagues who had been suspended for ransacking the home of the headmaster several months earlier. When the authorities refused to accede to this demand, the pupils boycotted their classes. Other schools joined and before long the original grievance had been superseded by others related to the education conditions in the schools. By February 1988, 80 percent of secondary education students had joined the strike. At this time, disturbances spread to the University, which the Government then closed. The students reacted by joining what was becoming a nationwide youth revolt, which was later joined by the teaching staff. In April, there was a ministerial reshuffling — the Ministry of Education was split — and the remainder of the academic year was used to negotiate a solution to the crisis. However, schools remained closed until October 1988, meaning that all students lost one school year.
8. Cf. *Ministère de l'Éducation Nationale* (1989).
9. For example, in February 1990, Niger experienced serious student unrest caused by Government reforms designed to give increased budgetary priority to primary education. The students' main complaint was that, in order to implement a gradual reallocation of education spending in favor of primary education (from 45 percent of the education budget in 1989 to 54 percent in 1995), the Government proposed inter alia to freeze the budget for student subsidies at its 1989 nominal level, and to abolish its policy of pre-recruitment to civil service employment of all students benefitting from scholarships. In 1988 student subsidies accounted for 64 percent of the higher education budget, and about two-thirds of all university students received scholarships (the amount is about twice the legal minimum wage for unskilled workers) to help cover living expenses (there is no tuition). While the outcome of the Government's current negotiations with students on these points is not yet known, it is clear that the influence on Government policy of the 4,000 students at the University far exceeds that of Niger's 800,000 children of primary school age who are unable to attend primary school due to a lack of facilities (only 29 percent of all children are enrolled in Niger).
10. An example of a situation where considerable efforts were devoted to developing highly necessary reforms which had not been implemented, and which were picked up in a Bank-supported adjustment operation, is given in the case of Ghana presented in this book.

INDUCING AND MONITORING POLICY CHANGE

Frances Kemmerer

This past decade has witnessed the development and rapid sophistication of education management information systems (EMIS) in developing countries. Paper and pencil tallies of the numbers of students, teachers, and schools have been replaced by computerized analyses of greater depth and breadth. The data sets now being constructed include information on the numbers and location of complete and incomplete cycle schools, the characteristics of teachers, school-level data on the gender and age distribution of students by grade, and school-level achievement (where such data are available).

While much has been written about the design and development of EMIS (Chapman 1989, Chapman and Boothroyd 1988, Windham 1988, Snyder and Nagel 1988), and research is emerging on the actual use of the data collected, less attention has been paid to the relationship between information and effective policy change.

In the interest of exploring the relationship between information and change, the paper first presents three propositions governing this relationship and then discusses the implications of those propositions for donors attempting to induce, monitor, and evaluate change. Effective policy change is defined here as movement from a less efficient to a more efficient educational system. Thus it purposefully excludes the type of policy pronouncements, so popular in developed countries, which legislate goals rather than facilitating or evaluating the alter-

native use of resources (Wise 1979). Educational efficiency is defined, in turn, as the least-cost means of producing gains in student learning or the most productive use (in terms of student achievement) of a given allocation of resources.

Information and Institutional Change

Information is the key to policy change. This proposition, which has served as the basis for heavy donor investments in EMIS, is generally interpreted as requiring quantitative data on system characteristics.

There is little evidence, however, to suggest a direct relationship between information on the numbers and characteristics of schools, teachers, and students and effective policy change in either developed or developing nations. A direct relationship presupposes that the sole goal of the educational system is to produce learning. Nowhere does this seem to be true. As Windham (1988) has pointed out, statements of the goals of education tend to be weighted more heavily toward rhetoric than substance. Even as goal statements are overly inclusive in terms of child development and child welfare objectives, they leave unstated the functional role of the educational system in the provision of public sector jobs and on-the-job training. Yet in most developing countries, government is the chief employer in the monetary sector, and within government the ministry of education has by far the largest payroll. In Somalia,

for example, almost half of all government employees work in education (GSDR 1984) and many of the leadership positions in other sectors are occupied by former teachers.

Acknowledging the fact that employment and other political goals are rival to the production of student learning goes a long way towards explaining the absence of policies and practices designed to deal with well-known system deficits. Poor teacher attendance, non-functioning materials and supervisory support systems, and the reluctance to adopt instructional technologies which obviate the need for ever more highly "qualified" teachers are the rule rather than the exception in much of the developing world. Similarly, allocation patterns favoring employment rather than productivity and higher education as opposed to primary education appear rational only if the goals of schooling are defined in terms of both educational and political objectives of the system.

The second proposition, then, is that *the relationship between system information and system change is mediated by political objectives*. This leads to the third proposition: namely, *that anyone desiring to induce change (from inside the system or without) must have detailed knowledge not only of system deficits but also of the political calculus governing the current distribution of costs and benefits, as well as individual perceptions of those costs and benefits*.

In short, framing effective policy reform depends not only on information on educational inputs, processes, and outputs but also on understanding *which* system objectives individuals within the system are trying to maximize and *why*. In the absence of this knowledge, even success in inducing change is unlikely to result in success in effecting lasting policy change, since the underlying incentives and disincentives for individual performance throughout the system will remain unchanged (Windham 1978).

In Somalia, for example, a crisis in the primary sector precipitated by declining enrollments and severe fiscal constraints led to development of a donor-inspired strategy which would have targeted all available Ministry of Education resources directly on the schools. While the Ministry endorsed the strategy, it was in fact never implemented. When a key actor in the Ministry was questioned as to why this was so, the response was, "I have no

doubt that the strategy will increase student achievement but it will not do anything for teachers."¹ In this case the construction of prestigious normal schools providing secondary equivalency to teachers with only primary education, and the employment of secondary leavers (of whom there was a surplus), not only competed with learning objectives but had a higher priority. Consequently, the rewards allocated to gatekeepers were based on their response to political priorities rather than to educational "policy" statements or system needs.

The difficulty involved in improving educational efficiency under the condition of rival goals is compounded by the fact that political priorities affect what information is collected, the accuracy and reliability of the information, the sharing of information within and among ministries, and the use of information. For instance, in many developing countries, there are far more teachers on the payroll than there are actually teaching. And of those teaching, attendance at school is sporadic. Yet the phenomenon of what the Haitians call "zombie" teachers is rarely discussed with outsiders, and few hard numbers are available. Information on the non-serving but salaried portion of the teacher force is not collected simply because the political environment is such that it cannot be used.

Similarly, collection of data on teacher attendance was not solicited from school principals because ministry personnel do not believe the data should or would be used. In Somalia, the argument of both planning department and school personnel against the collection of teacher attendance data is that teacher salaries are so far below the cost of living that it would be unfair to penalize teachers for high rates of absenteeism. Interestingly, however, teachers themselves do not hold this view. Teachers, presumably those who attend regularly, resent the fact that their salaries and benefits are the same as those of their less conscientious colleagues (Said and Jama 1989).

In ancient times, the bearer of bad news was usually killed. While this is no longer a common practice, educational planners who consistently report declining enrollments, high dropout rates, and poor examination results are not in an enviable political position in any country. More often than not when these con-

ditions prevail, planners are not put to the test since individuals at lower levels of the system will perceive an advantage in concealing information which produces negative benefits. In some cases, there is a high cost attached to providing any information at all.

Liberia provides a dramatic example of this. World Bank and USAID support in the 1970s and early 1980s resulted in the development of sophisticated educational censuses and analyses supported by a mainframe computer in the Ministry of Education. By 1988, however, the EMIS was survived by a handful of statisticians with no data to analyze and a mainframe computer in disrepair.

The remote cause of the collapse of the EMIS was the persistent ascendancy of the *political* goals of the educational system over *educational* goals. In lieu of a social welfare system, political efficiency was based on a patronage system with the Ministry of Education as the chief employer. Within this context, indicators of educational efficiency, if not irrelevant, were of secondary importance.

The proximate cause of the collapse of the EMIS, however, was a policy change which required that pupil registration fees collected at the school be sent to the Ministry of Education together with enrollment data. The rationale for the new policy was that the ministry was able to capture economies of scale in bulk purchasing (of school supplies and equipment) which were not available to individual schools. As the ministry budget was reduced to only salary expenditures over time, however, the ministry itself needed the funds to maintain its activities, and supplies were not sent to the schools. Schools, district, and regional offices also needing funds, therefore, had a strong disincentive for reporting accurate enrollments or reporting at all. As a result, it soon became impossible to establish the current status of the system in terms of numbers of students, student attrition and repetition rates, class size, or the distribution of teacher characteristics within or across counties.

Skepticism over the reliability of data based on awareness of the disincentives faced by data providers is not reserved to donors. Chapman, in a recent study of data quality and use in Nepal (forthcoming), discovered that aggregate enrollment data were much more accurate than policymakers had expected. Conflicting

Ministry of Education and Culture estimates were the product not of inaccurate reporting but of different divisions collecting the same data at different times in the school year and estimating data from schools which had not reported by the time each needed to complete its data set.

To summarize to this point, where competing goals exist, effective policy change requires information not only on the status quo but also on the benefit system supporting the status quo. Unless the new policy succeeds in altering the balance of incentives and disincentives in delivering educational services, the desired reform of practice is unlikely to occur. To the extent that political goals dominate educational goals of the system, however, much of the information necessary to frame policy change is apt to be unavailable or of unknown reliability. In such situations, donors are faced with the difficult choice of minimizing project activity or collecting original data and thus adding substantially to the cost of the intervention.

Inducing Policy Change

Given explicit information about and recognition of the political context of education, there are a number of strategies for inducing change. The most obvious approach is to reduce the competition between political and educational objectives governing educational systems by providing sufficient resources such that one set of goals need not be sacrificed to realize the other set of goals. For instance, in the example cited earlier of Somalia, the price of a concerted effort to improve what happens in schools might well be the building of one or more teacher training colleges.

In this case, however, accommodation of political and educational goals will promote educational efficiency only if three conditions are met. The first is that government has the absorptive capacity to assume the recurrent costs of these institutions. The second condition is that teachers remain in the system long enough for government to recover its investment in training. And the third condition is that normal schools present the most cost-effective means of improving educational efficiency. If the first two conditions were met, information needed to test the third condition would require in-depth study of the relation-

ship between teacher training (given a particular curriculum) and teacher performance. The costs and benefits of the normal school approach would then have to be compared to the costs and benefits likely to be generated by other approaches (such as programmed teaching, interactive radio, etc.). In the case of Somalia, however, institution-building violates the first condition (absorptive capacity), and therefore the strategy, while politically popular, would not likely result in increased efficiency.

In general, however obvious this approach is to the solution of the problem presented by rival goals, the reasons for not taking it are compelling. Investments in institution-building leave a legacy of recurrent fund obligations that most developing countries do not have the capacity to absorb. Liberia, for instance, has a number of institutions which act as a resource drain on the entire system. The 1989 Education and Human Resource Sector Assessment found, for example, that \$500,000 was spent annually on two rural teacher training institutes with a combined enrollment of 29 students. Other institutions, including a college of technology and several secondary high schools presented similar pictures of cost inefficiency.

In practical terms, this suggests that it is virtually impossible to accommodate rival political and educational goals and that reprioritization of the goals of education is necessary such that the stated objectives (student learning) gain ascendancy over the political objectives (employment, national prestige as conferred by universities, facilities, etc.).

For this reason another and more preferable approach to inducing change is policy adjustment lending, as described in the other chapters of this book. Essentially, the policy adjustment approach requires that priorities for education be realigned as a condition for lending. For contingency-based loans and grants to be effective, however, the amount of support offered must be large enough so that refusal to meet the conditions carries a political liability, thereby making effective policy change politically as well as educationally efficacious. As a result, it is unlikely that donors who are unwilling or unable to place a priority on investments in education can employ this strategy. The question thus remains as to what approaches donors with more modest amounts to invest can take to influence educational effi-

ciency at the margin.

The USAID IEES Project experience in collaborating with governments on sector reviews (in Botswana, Somalia, and Liberia) suggests that policy proposals that had been thwarted when routed through normal ministry channels were facilitated when the debate was raised to a higher policy level.² Frequently, would-be reformers in the ministry had adequate knowledge of system deficits but lacked the power to change system priorities.

In Botswana, for instance, the fact that the locally funded community junior secondary schools were a source of both system inequity and inefficiency was not new information. Discussion of the sector review findings in a multi-agency setting, however, led to the building of a strong finance and education reform coalition which was able to induce change. At the same time, the USAID commitment to assist in funding the change provided the ministry with an incentive to make change a priority. In short, there were no real losers. As a result, student entitlement to education through the junior secondary level acquired broad political support both in the ministry and throughout government.

A second strategy which holds promise for relatively small donors involves donor coordination in the identification of system needs and remedies. Division of responsibility among donors for supporting different facets or levels of an educational system is not likely to increase efficiency unless donors subscribe to a mutually agreed-upon strategy for quality enhancement. For example, the cost-effectiveness of the decision to use programmed teaching at the primary level rests on the fact that little or no preservice training is necessary and that the programmed teaching materials obviate the need for textbooks. However effective programmed teaching proves to be in improving skills, its potential efficiency will remain unrealized if other donors continue to support traditional teacher training and textbook development and production. There is mounting evidence, in fact, that competitive strategies leave a legacy of confusion and waste of resources, while efforts at coordination help to set the stage for system-wide reform.

Other strategies which have a record of mixed success are marketing the desired policy change as an "experiment" and thereby defer-

ring the political debate until the effectiveness of the desired policy change has been established or using a bottom-up rather than a top-down approach. Success with the experimental approach, however, is likely to be realized only if the donor is willing to subsidize the institutionalization of the innovation after completion of the experiment and has effectively marketed the innovation to relevant interest groups during the experimental phase. If neither of these conditions apply, the donor is forced to argue for implementation on the basis of technical rationality alone in an arena where political rationality is dominant and where stakeholders' opinions of expected benefits, however correct or incorrect, have already been formed.

The benefits of the bottom-up strategy, which has proved so successful in the agricultural and health services sectors (Rogers 1983), may be limited due to the predominance in developing countries of highly centralized educational bureaucracies, the central provision of teachers and other resources, and the fact that the benefits to communities and clients of improved educational services may not be immediately obvious. The lessons to be learned from the success of microlevel strategies are, however, that whatever the strategy used to induce policy change, the policy package itself must remain flexible enough to permit local adaptation, the effects of the change must be observable to the adapters, and the institutional structures necessary to support the policy change must be operable (Foster 1974, Kemmerer and Wagner 1986, Rogers 1983, Thiagarajan 1985).

Monitoring Policy Implementation

The process of monitoring and evaluating change is fundamentally different from that of inducing change. The tasks related to inducing change are largely political and focused on the macro policy level, while those related to implementation and evaluation are primarily technical and focused on the micro level. Successful implementation of policy depends, however, on intense communication among levels of the system.

Technical difficulties with the innovation itself must be identified and solved (e.g., new curriculum is written for 180 days of schooling, while the average rural school is open 70 days).

Unintended effects of the policy change, stemming from incomplete knowledge of how decisionmakers at all levels of the system will respond to the change, must be addressed (e.g. teachers do not understand the new curriculum so continue to teach the old curriculum). And finally, difficulties in the operation of the support systems needed to enable implementation of the change must be explicitly recognized and dealt with (e.g., texts are not delivered, supervisors do not have the gasoline to visit schools, etc.).

This suggests not only that policy implementation increases the need for information on the operation of the educational system but also that the policy, no matter how carefully thought out and designed, will have to be modified over time to suit local conditions if it is to be effective. In sum, all policy should be subjected to a formal formative evaluation process.

In Botswana, for example, the government/community partnership in the provision of junior secondary schooling has proved problematic. Local ingenuity in exporting costs has increased the burden to government beyond an acceptable level (Swartland and Taylor 1988). While government has not attempted to systematically study the problems, micro-level research indicates that some of the difficulty stems from widespread misunderstanding of the community's role, the existence of unintended effects derived from changing the organizational structures of already existing schools, and definition of the school "community" as inclusive of more than one traditional community (Molutsi 1988). Since none of these are irremediable problems, it would seem that micro-level research tightly focused on implementation issues would suggest appropriate remedies.

While the requirements of formative evaluation in terms of clinical and greenhouse tests are not politically or technically feasible with regard to some types of policy, they are widely applicable to policy components which dictate a change in the way resources are allocated at intermediate or local levels of the system. The advantage of the so called "greenhouses" or staged implementation is that by reducing scale, information can be obtained more rapidly from the field and necessary adjustments fed forward into policy modification.

Where immediate full-scale implementation

is the only practical course, the process of obtaining the necessary information is both more complicated and more expensive. This suggests that when major policy change is undertaken, thought and resources must be given simultaneously to improvement of the existing EMIS system. Most EMIS systems do not track the actual availability of inputs, with the exception of teacher characteristics, at the school level. Yet the collection of such data (see Figure 5.1) represents little additional cost or expertise if added to already existing school surveys.

More costly and difficult to collect, of course, are process data — which answer the questions of how the new resources are being used and if they are being used inappropriately, why? In the initial stages of implementation, the answers to these questions are often provided by the technical assistants hired to assist in monitoring and evaluating implementation of the new policy. Ideally, however, before implementation is completed, the planning departments should have the capacity to manage qualitative as well as quantitative data, with one set of data informing the accuracy of the other.

In contrast to the formative evaluation approach to policy change, the summative evaluation approach offers neither the information necessary to modify policy nor confirmation that the policy has in fact been implemented. Achievement data, even when available on the level of the school, are largely uninterpretable unless disaggregated information is also available on both inputs and processes and their effect on individual decisionmaking. While data on student achievement have little utility by themselves, they are of central importance to the validation of policy change, since in most cases student achievement is the object of such change.

But valid data on achievement, as on educational processes, come at great cost. Even in those countries where national examinations are given, there is little evidence that the curriculum is sufficiently developed to serve as a reliable basis for a national examination system, that the test what is actually taught, or that test taking and grading are accomplished under professional conditions. In many countries, therefore, the development of the curriculum and tests are part of the price of effective intervention in a subsector.

By way of summary, Figure 5.1 outlines the

information needed to ensure effective policy implementation. The listing is clearly not exhaustive, since different policy changes carry with them the need for different types of data. While system and school-level quantitative data should be collected annually, qualitative data can be collected less frequently after implementation is well underway. A regular cycle for the collection of qualitative data is important, however, since such data (together with inspectors' reports) provide a necessary check on the accuracy of the annual school survey data.

Conclusions

Efficiency in the delivery of educational services is based on the integration of instructional and instructional-support subsystems. Consequently, it is almost impossible to improve one aspect of an educational system while ignoring others. Further, the complexity of even small systems indicates, first, that policy change is best considered as a long-term modification process rather than as a short-term intervention; and, second, that information demands for both maintenance and modification increase rather than decrease as the subsector develops or efficiency increases. These realities underscore the suggestions made earlier that external interventions by donors are likely to prove effective only where there is long-term donor involvement, where there are coordinated donor approaches to the subsector problems, and where the necessary capacity-building is accomplished.

Long-term Donor Involvement. Donors who remain involved in an educational subsector over the long term have a comparative advantage in both inducing and effecting policy change since they have the information necessary to frame and market change. Moreover, long-term involvement makes it more credible that the donor will assist the Ministry in addressing any serious unintended consequences that may occur.

Donor Coordination. The size of many educational subsectors suggests that no single donor can long remain the only benefactor for any given level. Sharing information and closely integrating efforts to improve educational inputs and processes is therefore necessary if system efficiency is to be maximized.

Figure 5.1
Data Needed to Monitor Policy Implementation

Quantitative System-Level Data

- Per pupil cost of resources
- Output of teacher training institutions
- Number of teachers at different levels of the salary and allowance schedules
- Birth rate by region

Quantitative School-Level Data

- | | |
|--|--|
| <ul style="list-style-type: none">• The number of days school was open last year• The average length of the school day last year• Enrollments by age, grade and gender• Teacher turnover rate• Average teaching load per week• Average daily student attendance by gender and grade• Average teacher attendance by gender and grade level taught• Number of textbooks per class• Number of classrooms with blackboards and chalk | <ul style="list-style-type: none">• Number of exercise books and pencils available• Number of visits by school inspectors• Number of students who dropped out of school during the course of the year by age, grade, and gender• Number of students promoted to the next grade by age, grade, and gender• Resources provided by the community in the past academic year• National examination results by grade and subject, age, and gender |
|--|--|

Qualitative School and Classroom-Level Data

- Amount of class time spent on instruction
- Type and amount of homework assigned by grade
- Average time spent using different instructional technologies in class¹
- Amount of teacher time spent in preparation for class
- Substance and regularity of classroom supervision by headmasters and inspectors
- Provisions made for remediation
- Provisions made for acceleration
- Provisions made for class coverage during teacher absences
- Number of teachers with second jobs
- Standard of living of headmaster and teachers
- School/community relationships
- Parental involvement
- School climate (discipline, headmaster/teacher relations, teacher/student relations, etc.

¹Instructional Technology is defined as a specific combination of teacher time, student time, and material resources.

Note: See also Windham (1988) and Snyder and Nagel (1988).

Capacity Building. Strengthening the government's own ability to frame, monitor, and implement change is essential if efficiency considerations are to be institutionalized. This requires development of capacity, within the appropriate ministry, for the routinized collection of quantitative data on the availability of inputs and on outputs and the collection and analysis of qualitative data on system processes and longer-term outcomes.

This chapter closes where it began, with the 1978 warning by Douglas Windham on the critical role of information on the distribution of individual costs and benefits in inducing, implementing, monitoring and effecting change:

Planners, no matter how much discretionary power they have, never determine the actual outcome of policy. They can only set in motion forces which they anticipate, with or without rational justification, will have certain effects. The effects themselves are the result of the millions of micro-decisions made by individuals responding to the planners' policies in terms of (a) the actual pattern of rewards (positive or negative) which their decision matrix presents, and (b) their perception of this pattern. The second condition is at least as important as the first because individuals' information about incentives determines the degree to which they will respond according to planners' expectations. (Windham 1978, p. 4.)

NOTES:

1. Conversation with a Ministry of Education official, Mogadishu.
2. The IEES (Improving the Efficiency of Educational Systems) Project is a ten-year initiative funded by USAID. The objective of the project, now in its sixth year, is to assist developing countries in improving the perfor-

mance of their educational systems and in strengthening their capacity for educational planning, management, and research. Participating countries have included Botswana, Haiti, Indonesia, Liberia, Nepal, Somalia, the Yemen Arab Republic, and Zimbabwe.

LESSONS LEARNED?
A Colorful Rainbow of Viewpoints

Bruce Fuller

**What Are We Learning about
Adjusting Policy?**

Only recently has the first generation of policy adjustment programs — in Ghana, Malawi, and Senegal — approached their completion dates. Five years into these pioneering initiatives — perhaps this is Lesson 1 — we are realizing that it is difficult to assess local effects of central policy change when evaluation information is (and remains) scarce. Any lessons put forward must be considered quite tentative. Long-term results are yet to be observed. [More recent policy programs, such as the joint World Bank/USAID operation in Mali, are building in more careful evaluation components.]

We do know, as evidenced by chapters in this book, that governments at times are able to make central policy changes — some are even sustained: Malawi still maintains higher recurrent spending for textbooks; Ghana has adjusted student subsidies toward greater equity; Senegal has rationalized its teacher allocation practices. Difficult policy options have become real choices which are now largely institutionalized.

Implementation. A bundle of related lessons emerge from these chapters related to how governments can increase the odds of successful implementation. First, broad participation is essential, keeping in mind that interest groups vary in the extent to which they want to see the central state become more effective and legitimate. Second, reading and moving with ex-

ternal forces is just as important as crafting the internal elements of a policy program. The advisability of key policy adjustments must be articulated, and this involves understanding external economic and political winds. Third, conceptually simple central policy changes are easier to implement (holding political opposition constant) than are policies requiring complex alteration of local behavior. Attempts to legislate improvements in pupil repetition rates, for instance, have proven futile. Policy and budget tools can be efficacious; but they must be applied realistically to effectively touch the behavior of local actors.

The complexity issue is particularly important in trying to improve institutional capacities. For example, broadening the leadership role of headmasters, boosting local families' contribution to the village school, or improving textbook distribution can involve policy change and manipulating signals sent from central government. But shifts in social roles and gains in institutional capacities — aimed at raising school quality and efficiency — also require complex, even subtle changes on the ground. Policy levers provide a beginning point, but they are insufficient in accomplishing sustainable organizational change locally.

Local Crafting of Policy Options. Finally, what are we learning about how to improve governments' willingness and technical capacity to generate policy alternatives? Our chapters from government leaders — Mrs. Yeboah and Mr. Ngaye — reveal a certain enthusiasm, a

sense of challenge in trying to implement important policy and budget reforms. But policy recipes continue to be advanced largely by international agencies. Too often, government leaders are in the position of reacting to these outside proposals.

At the same time, education and finance ministries often articulate why certain policy and budget shifts are advisable — to conserve resources, to support those school inputs and human ingredients that effectively boost pupil achievement, and to equalize who pays and who benefits from schooling. A major challenge is to raise governments' own ability to craft their policy options and to assess likely effects on teachers, families, and children. Even when policy adjustments yield benefits, if they were authored by outsiders, gains in internal political will and technical prowess — necessary in continuing policy momentum — will be slight.

A Variety of Voices: Comments and Conference Reports

The chapters in this book represent just a fraction of the many viewpoints and ideas expressed during the Washington conference on Education Policy Adjustment. Appearing below is a sampling of the colorfully diverse opinions and insights into the process of adjusting government policies and budgets. In addition, conference participants worked in small groups, addressing a number of specific issues. Reports from each group also appear below.

L.B.B.J. Machobani
Minister of Education
Lesotho

"We must develop institutions — efforts which are self-initiated — that are more relevant to the educational needs of our countries. A mood of introspection is moving across Africa — growing from a feeling that false starts were made in the 1960s. But [today's] programs and institutional improvements must be sustainable. We must resist prescriptions that are imposed from the outside. If governments are able to work with donors, like the Bank, in developing policy options, this [cooperative] strategy is more likely to work."

"Ghana is an excellent example of how

strong leaders can look realistically at its problems and develop clear commitment, of releasing energies of the people to address development and productivity. In Lesotho, we too are going through a process of identifying more realistic goals and programs."

"We must face the political realities and constraints. The minister of education must develop a steel stomach to deal with protest and resistance to change."

Tesfaye Dubale
Ministry of Education
Ethiopia

"Donors have focused on buying specific instructional materials or inputs. But these tools should be framed in a broader policy context. The shift of resources toward primary education — assisting the masses — is a political imperative that should be applauded within initial sector adjustment efforts."

"We must focus on specific priorities — in terms of how policy and budget improvement match targeted investments on school inputs. And we must think through how to encourage greater effort by local peoples, sorting out the proper role of the education ministry and families."

Peter Moock
Africa Region, Technical Department
World Bank

"Ghana's policy reform was first proposed in 1973 but it had drifted for almost 15 years. Then, a very courageous group in the government decided that action must be taken, otherwise the educational system would continue to decline. You must have this strong leadership within the country, otherwise little can be done by outside donors or advisors."

Gary Theisen
USAID Office of Education

"It is critical to sort out those adjustments that are devised with donors versus those policy and budget changes that unfold within governments, independent of action by international agencies. Also we have heard around the table the critical element of political leadership ... and the importance of constructing policy strat-

egies that flow from this commitment."

"We must put in place benchmarks and ways of monitoring how policy change is touching those who reside in classrooms: teachers and children. We know very little about how adjustments in central policy actually influence the motivation of teachers and the achievement of students."

Wadi Haddad
Senior Education Advisor
World Bank

"World Bank experience in lending for policy change is not limited to one mechanism but includes sector adjustment loans and investment loans that resemble more conventional projects. Over the past five years, the Bank has made 91 loans in the education sector; just three have been pure sector adjustment loans. Sector adjustment loans tend to focus on general budgetary and policy reform; more conventional investment loans address school quality and efficiency in more specific ways. Some sub-sectors, such as vocational education, have not yet been pulled into policy-intensive lending operations."

REPORTS OF WORKGROUPS

GROUP 1 - Political Constraints and Consensus Building

Noel McGinn, Harvard University
Rapporteur

Our group looked at several related topics: (1) the economic costs of political mistakes, (2) in-country stakeholders who influence, and are affected by, policy change, (3) how to develop a common framework and way of defining sector problems for discussion among constituencies, (4) how to construct a national consensus and how donors can help, (5) how governments can move forward in the absence of a consensus, and (6) how policy or budget change can be reinforced, made more sustainable over time.

We must recognize that sector adjustment may incur political costs — in terms of teacher or student resistance which has been substantial in a few cases. Thus we should focus on the stakeholders, who gains and who loses under

alternative policy proposals. Broad discussion of sector problems early on — working with various national actors — can help build a consensus, reinforce the authority of the leadership, and minimize political risks. This careful, deliberative strategy must be balanced against "windows of opportunity" that may arise.

One example is how the tools of policy analysis might be used with teacher union leadership — particularly how alternative investments and options can lead to different policy objectives. This should emphasize that inaction will yield certain effects, such as continuing certain patterns of subsidy or the erosion of educational quality in certain situations.

Donors can provide technical assistance to education ministries in presenting their case to various stakeholders, from their own finance ministry to teacher and student organizations.

What can governments and donor agencies do to help ensure sustainability of policy adjustments once they are announced? An important first step is to establish concrete benchmarks to assess the implementation and effects of policy change at the school and classroom level.

Donors also can play a big role in helping to finance the "transitional cost" associated with implementing policy and budget changes. If subsidies are being shifted from higher education to primary education, donors' support is needed to cushion short-term hardship linked to such structural changes.

GROUP 2 - The Content of Sector Adjustment Programs

Victor Barnes, USAID
Rapporteur

We agreed that sector analysis was an important starting point. But governments and donors also should carefully examine political feasibility, key points of opportunity, and the institutions (central and local) that are being called upon to implement sustainable, often controversial structural change.

Sector analysis needs to be dynamic, not static. As policy change is implemented, results (intended and unintended) should be tracked. Donor agencies, in general, are not set up to do long-term analysis. Governments also should

be assisted to examine the social impact of sector adjustment efforts. Overall, governments should gain greater control of the analytic process.

Sector analysis could better define a continuum for policy change, for example, a set of strategies aimed at improving educational quality, rather than proposing a set list of policy or budget reforms. An array of increasingly strong measures might be explored within a given policy objective such as reduced subsidies, improving the mix of instructional inputs, or raising capacity to monitor student achievement.

The group emphasized that the issue is not sector adjustment versus conventional project support. Policy adjustment in education often requires more traditional project inputs and technical assistance. We also have seen that policy change will not stick without determined, long-term efforts at improving institutional capacities. In addition, traditional project lending often sets the stage for deeper policy or fiscal change. Where USAID has supported management information development or policy research, for instance, these activities have prompted discussion of policy options within governments.

Group 3 - Implementing Policy Adjustments

*Julie Rea, USAID
Rapporteur*

The group focused on concrete steps that might be taken to (1) construct, then reinforce, a broad in-country consensus for policy or budget change, and (2) how to generate alternative policy changes, but then limit structural reforms actually undertaken — to increase the odds of sustainable institutional change. We generally talked about the conflict between some donors' push for short-term, measurable changes (such as specific budget changes) versus a nation's need to carefully build and improve capacities of institutions.

A government-set task force — with representation from many constituencies — might initiate the policy dialogue, conduct a careful sector assessment, and begin to develop policy and budget choices. This task force should look at (1) issues of timing and when certain policies should be implemented, (2) social market-

ing or ways of informing people at the grassroots about why adjustments or policy improvements are being undertaken, and (3) strategies for coordinating donor support, to ensure that costs associated with adjustment are eased by external resources.

GROUP 4 - Improving Information for Tracking Progress in the Education Sector

*James Socknat, World Bank
Rapporteur*

First, we should sort out who is demanding the information and what types of information are useful to whom. This includes central governments, donors, local education offices, headmasters, and communities. Second, we emphasized that information for monitoring progress (say, with indicators of school quality) differs from information required for evaluating adjustment programs or more conventional education projects.

Information also varies in terms of types of interventions undertaken by governments or donors. Tracking shifts in government or sector budgets involves fairly straightforward data. Data on the distribution of textbooks or the long-term effects of teacher training improvements become more complex and more costly to collect.

Information on actual pupil achievement is most important. Then we should back up and assess whether central policy change or the infusion of alternative school inputs is correlated with actual pupil achievement. Where information on this complete sequence (from central action to school-level effects) is not available, monitoring of selected policies or inputs is a useful first step.

As we invest in education management information systems (EMIS), we should ask, Why is this type of information useful? What does it tell us about policy action, input levels, and school-level effects? Early MIS systems — now in place in many education ministries — are embedded in old questions linked to how quickly the education system is expanding. So enormous effort is spent on collecting data on numbers of schools, students, and teachers. Relatively little information is available to assist governments in making decisions about improvements in quality. Counts of basic inputs

(textbooks, teacher guides, exercise books) are rarely made, or are unreliable. Data on actual levels of pupil literacy are usually not available and are rarely linked to variation in different inputs. Improvements in ministry EMIS systems should address these issues regarding educational quality.

Ideally, better monitoring systems and concrete indicators (of school quality and efficiency) can inform governments and donors on the impact of policy adjustments. Progress must be made on increasing the reliability of school

data. This depends on demonstrating to headmasters how the data can be useful to local school staff and the central government. Evaluation is critically important to the education sector in developing a self-critical process and in taking control over the generation of policy and fiscal alternatives. Building the capacity for evaluation and monitoring — conducted by governments and in-country researchers — is an important long-term project that requires sustained support and patience on the part of donors.

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